Johnson, R.V.
1938

Unit organization of the topic agriculture for a seventh-grade course in occupations.

BOSTON UNIVERSITY
SCHOOL OF EDUCATION
LIBRARY

Ed.

The Gift of Ruth V. Johnson

Thesis
Johnson, R.V

1938

Thesis
1938
Johnson

BOSTON UNIVERSITY

SCHOOL OF EDUCATION

Thesis

UNIT ORGANIZATION OF THE TOPIC AGRICULTURE FOR A SEVENTH-GRADE COURSE IN OCCUPATIONS

Submitted by

Ruth Victoria Johnson

(Ed.B., Brown, 1931)

In partial fulfillment of requirements for

the degree of Master of Education

1938

First Reader: Roy O. Billett, Professor of Education
Second Reader: Jesse B. Davis, Professor of Education
Third Reader: Wilbur I. Gooch, Associate Professor of Education

Boston University
School of Education

Gift of R. V. Johnson
School of Education
June 27, 1938
17024

CONTENTS

CHAPTER		PAGE
I	THE SCOPE AND PURPOSE OF THE THESIS	1
	The Subject Field	1
	The place of occupations	1
	Teaching agricultural occupations in city schools	1
	Agriculture basic to civilization	2
	The Problem of Method	2
	Difficulties encountered	2
	The Unit-Assignment Method	2
	Terms Defined	3
	The unit	3
	The delimitation	3
	The unit assignment	4
	The study guide	4
	Optional activities	4
	Class presentation period	4
	Testing	5
	Provision for individual differences	5
	Time allotment	5
	Meaning of symbols	5

CONTENTS

CHAPTER		PAGE
I	THE SCOPE AND PURPOSE OF THE THESIS	1
	The Subject Field	1
	The place of composition	1
	Teaching agricultural composition in city schools	1
	Agriculture unfit to civilization	2
	The Problem of method	2
	Difficulties encountered	2
	The Full-Assignment method	2
	Terms defined	3
	The unit	4
	The delimitation	5
	The unit assignment	6
	The study guide	6
	Optional activities	6
	Class presentation period	7
	Testing	8
	Provision for individual differences	8
	Time allotment	8
	Keeping of records	8

PAGE

The School 6

Organization 6

Data available 6

The community 7

The Class for Which These Units Were Organized 7

Classification 7

Number of pupils in each group 8

Chronological age 9

Ability ratings 11

Distribution of achievement goals 11

Nationality of parents 12

Number of children in family 13

Occupations of fathers and mothers 15

Reading ability of pupils 16

Out of school activities 18

A Discussion of the Units and Unit Assignments Submitted 20

Purpose 20

Selection 20

Required Units 21

The place of group work 21

Lack of information in textbooks 22

Vocabulary 22

Digitized by the Internet Archive
in 2016 with funding from
Boston Library Consortium Member Libraries

https://archive.org/details/unitorganization00john_0

PAGE

The need for many references 22

Increasing the vocabulary 23

Use of visual aids 23

Revision 23

Time allotment 24

Testing 24

List of references for pupil use 24

II OUR CHANGING FARM LIFE 26

The Unit 26

The Delimitation 27

Incidental Learning Products 32

Unit Assignment 33

Introductory period 33

Individual work period 39

References 40

Optional activities 41

Class presentation period 47

Mastery Test 48

III THE MARKET GARDENER 53

The Unit 53

The Delimitation 53

Incidental Learning Products 60

Unit Assignment 61

Page

The need for many references 22

Increasing the vocabulary 23

Use of visual aids 23

Revision 23

Time allotment 24

Testing 24

List of references for Model use 24

VI OUR GRADING PLAN LIKE 26

The Unit 26

The Delimitation 27

Incidental Learning Products 32

Unit Assignment 33

Introductory period 33

Individual work period 38

References 40

Optional activities 41

Class presentation period 47

Mastery Test 48

VII THE MARKET GARDENER 53

The Unit 53

The Delimitation 56

Incidental Learning Products 60

Unit Assignment 61

PAGE

Introductory period 61

Individual work period 63

References 66

Optional activities 67

Class presentation period 72

Mastery Test 72

IV THE DAIRY FARMER 76

The Unit 76

The Delimitation 76

The Incidental Learning Products 84

Unit Assignment 84

Introductory period 84

Individual work period 85

References 87

Optional activities 88

Class presentation period 92

Mastery Test 93

V THE POULTRY FARMER 99

The Unit 99

The Delimitation 99

Incidental Learning Products 105

The Unit Assignment 106

Introductory period 106

PAGE

Introductory period 61

Individual work period 63

References 66

Optional activities 67

Class presentation period 72

Mastery Test 72

IV THE DAIRY FARMER 75

The Unit 75

The Delimitation 76

The Incidental Learning Products 84

Unit Assignment 84

Introductory period 84

Individual work period 85

References 87

Optional activities 88

Class presentation period 92

Mastery Test 93

V THE POULTRY FARMER 99

The Unit 99

The Delimitation 99

Incidental Learning Products 105

The Unit Assignment 106

Introductory period 106

PAGE

Individual work period 106

References 109

Optional Activities 110

Class presentation period 110

Mastery Test 112

VI THE NURSERYMAN 118

The Unit 118

The Delimitation 119

The Unit Assignment 124

Introductory period 124

Individual work period 125

References 127

Optional activities 128

Class presentation period 129

Mastery Test 130

VII THE FLORIST 136

The Unit 136

The Delimitation 136

The Unit Assignment 142

Introductory period 142

Individual work period 143

References 145

Optional activities 145

PAGE

Individual work period 106
References 109
Optional Activities 110
Class presentation period 110
Mastery Test 112
VI THE INTERVIEW 115
The Unit 118
The Delimitation 119
The Unit Assignment 124
Introductory period 124
Individual work period 125
References 127
Optional activities 128
Class presentation period 129
Mastery Test 130
VII THE NOVELS 136
The Unit 138
The Delimitation 138
The Unit Assignment 142
Introductory period 142
Individual work period 143
References 146
Optional activities 145

PAGE

Class presentation period 147

Mastery Test 147

VIII THE LANDSCAPE GARDENER 152

The Unit 152

The Delimitation 153

The Unit Assignment 159

Introductory period 159

Individual work period 161

References 163

Optional activities 164

Class presentation period 165

Mastery Test 167

IX THE FRUIT-GROWER 171

The Unit 171

The Delimitation 171

The Unit Assignment 176

Introductory period 176

Individual work period 176

References 179

Optional activities 179

Class presentation period 181

Mastery Test 182

PAGE

Class presentation period 147

Mastery Test 147

VIII THE LANDSCAPE GARDENER 152

The Unit 152

The Delimitation 153

The Unit Assignment 159

Introductory period 159

Individual work period 161

References 163

Optional activities 164

Class presentation period 165

Mastery Test 167

IX THE FRUIT-GROWER 171

The Unit 171

The Delimitation 171

The Unit Assignment 176

Introductory period 176

Individual work period 176

References 179

Optional activities 179

Class presentation period 181

Mastery Test 182

PAGE

X THE STOCK-RAISER 186

The Unit 186

The Delimitation 186

The Unit Assignment 194

Introductory period 194

Individual work period 195

References 199

Optional activities 200

Class presentation period 202

Mastery Test 202

XI THE FORESTER 208

The Unit 208

The Delimitation 209

The Unit Assignment 217

Introductory period 217

Individual work period 218

References 221

Optional activities 221

Class presentation period 223

Mastery Test 223

XII A DISCUSSION ON THE TEACHING OF THE UNITS 228

The Problems Encountered 228

Pupil attitude 228

PAGE

X THE STOCK-RAISER 186

The Unit 186

The Delimitation 186

The Unit Assignment 194

Introductory period 194

Individual work period 198

References 199

Optional activities 200

Class presentation period 202

Mastery Test 202

XI THE FORESTER 208

The Unit 208

The Delimitation 209

The Unit Assignment 217

Introductory period 217

Individual work period 218

References 221

Optional activities 221

Class presentation period 222

Mastery Test 225

XII A DISCUSSION OF THE TEACHING OF THE UNITS 229

The Problems Encountered 228

Pupil attitude 228

PAGE

The lack of texts 228

The reading level of texts 228

Meeting the Problems 229

Change in attitude 229

Collecting information 229

Vocabulary building 230

Various Methods Used in Mastering the Units 230

Written work 230

The use of the opaque projector 230

Simple dramatization 231

Notebook work 231

Blackboard charts 231

Correlation with other departments 231

Concluding statement 233

APPENDIX 235

Keys for Mastery Tests 235

BIBLIOGRAPHY 242

PAGE

The lack of texts 228

The reading level of texts 228

Meeting the problems 229

Change in attitude 229

Collecting information 229

Vocabulary building 230

Various Methods Used in Mastering the Units 230

Written work 230

The use of the opaque projector 230

Simple dramatization 231

Notebook work 231

Blackboard charts 231

Correlation with other departments 231

Concluding statement 232

APPENDIX 236

Keys for Mastery Tests 236

BIBLIOGRAPHY 243

LIST OF TABLES

TABLE		PAGE
1	Distribution of Chronological Age in the Several Class Sections	9
2	Distribution of Ability Levels According to Intelligence Quotients in the Several Class Sections	12
3	Distribution of Achievement Goals in the Several Class Sections	13
4	Distribution of Pupils in the Different Class Sections According to the Birthplace of Parents	14
5	Number of Children in the Different Families Represented in the Class Sections	15
6	Distribution of Reading Scores and Grade Levels in Reading of Pupils in Different Class Sections	17
7	Out of School Activities Listed by Pupils in Different Class Sections	19

LIST OF TABLES

TABLE		PAGE
1	Distribution of Chronological Age in the Several Class Sections	9
2	Distribution of Ability Levels According to Intelligence Quotients in the Several Class Sections	12
3	Distribution of Achievement Goals in the Several Class Sections	13
4	Distribution of Pupils in the Different Class Sections According to the Birthplace of Parents	14
5	Number of Children in the Different Families Represented in the Class Sections	15
6	Distribution of Reading Scores and Grade Levels in Reading of Pupils in Different Class Sections	17
7	Out of School Activities Listed by Pupils in Different Class Sections	18

CHAPTER I

THE SCOPE AND PURPOSE OF THE THESIS

The Subject Field

The place of occupations.-- The study of occupations has a vital place in a modern program of secondary education. Not only is it important as one step in the preparation needed to select a life career, but also as an aid to the understanding and appreciation of our complex social life, so dependent upon the various occupational services. Co-operation and understanding are based upon knowledge and adequate information, and the way to better living together lies through the development of sincere appreciation and respect for those upon whose services our very existence and comfort depend.

Teaching agricultural occupations in city schools.-- Viewed from this standpoint it is difficult to understand why the old question is raised again and again: "Why teach city children about workers in agriculture?" The answer is that in our interdependent ways of living, the problems of farm life effect all city people. The reverse is also true. There can be no wide separation. Furthermore, agriculture

CHAPTER I

THE SCOPE AND PURPOSE OF THE THESIS

The Subject Field

The place of occupations.-- The study of occupations has a vital place in a modern program of secondary education. Not only is it important as one step in the preparation needed to select a life career, but also as an aid to the understanding and appreciation of our complex social life, so dependent upon the various occupational services. Co-operation and understanding are based upon knowledge and adequate information, and the way to better living together lies through the development of sincere appreciation and respect for those upon whose services our very existence and comfort depend.

Teaching agricultural occupations in city schools.-- Viewed from this standpoint it is difficult to understand why the old question is raised again and again: "Why teach city children about workers in agriculture?" The answer is that in our interdependent ways of living, the problem of farm life affect all city people. The reverse is also true. There can be no wide separation. Furthermore, agriculture

is not far removed from boys and girls who live in a large city. Agricultural occupations are carried on to some extent in every large city, and these enterprises offer both vocational information and opportunity.

Agriculture basic to civilization.-- Of all occupations the field of work that is fundamentally basic to our living is agriculture. Any educational practice that will prepare boys and girls to understand the social significance of agriculture and agricultural problems is helping to develop a truly democratic citizenry, whose members understand and accept responsibility for group co-operation in its broadest sense.

The Problem of Method

Difficulties encountered.-- The attempt to teach agricultural occupations to city boys and girls without a realization of the above implications is open to failure. Even when these implications are grasped by the teacher, there is still the problem of changing the attitude of the average boy and girl toward farming and related tasks. Unless he is so directed, the boy or girl, brought up in the city, fails to recognize the close relationship and every-day contacts that he has with agriculture. Owing to the lack of knowledge and insight of the pupil, the teacher has the problem of motivation.

The Unit-Assignment Method.-- The writer faced the

is not far removed from boys and girls who live in a large city. Agricultural occupations are carried on to some extent in every large city, and these enterprises offer both vocational information and opportunity.

Agriculture basic to civilization.-- Of all occupations the field of work that is fundamentally basic to our living is agriculture. Any educational practice that will prepare boys and girls to understand the social significance of agriculture and agricultural problems is helping to develop a truly democratic citizenry, whose members understand and accept responsibility for group co-operation in its broadest sense.

The Problem of Method

Difficulties encountered.-- The attempt to teach agricultural occupations to city boys and girls without a realization of the above implications is open to failure. Even when these implications are grasped by the teacher, there is still the problem of changing the attitude of the average boy and girl toward farming and related tasks. Unless he is so directed, the boy or girl, brought up in the city, fails to recognize the close relationship and every-day contacts that he has with agriculture. Owing to the lack of knowledge and insight of the pupil, the teacher has the problem of motivation.

The Unit-Assignment Method.-- The writer faced the

difficulty referred to in the above paragraph. The problem resolved into (1) the selection of those concepts which would mean most to the city-bred boy and girl, and (2) the problem of presenting the work and guiding the pupil through the study so that his interest would be actively enlisted and effective learning would take place. In the Unit-Assignment Method as recently developed at Boston University [1] the writer found the procedure that proved most satisfactory in solving the problem. The application of the psychological principles underlying the Unit-Assignment Method to the teaching of occupations in the field of agriculture is the contribution of this thesis.

Terms Defined

The unit.-- Those concepts, skills, abilities, attitudes and appreciations, which, if learned, will result in modification of pupil behavior, mentally, physically, and socially, compose the unit. The definite statement of the modifications he purposes to effect gives the teacher definite outcomes for which to plan and check.

The delimitation.-- The delimitation is the "breaking up" of the subject matter into smaller concepts, skills or abilities which must be mastered to achieve the unit. This

1/ Course given by Dr. Roy O. Billett, "Unit Assignment in Secondary Education."

difficulty referred to in the above paragraph. The problem resolved into (1) the selection of those concepts which would mean most to the city-bred boy and girl, and (2) the problem of presenting the work and guiding the pupil through the study so that his interest would be actively aroused and effective learning would take place. In the Unit-Assignment Method as recently developed at Boston University [1] the writer found the procedure that proved most satisfactory in solving the problem. The application of the psychological principles underlying the Unit-Assignment Method to the teaching of occupations in the field of agriculture is the contribution of this thesis.

Terms Defined

The unit.-- Those concepts, skills, abilities, attitudes and appreciations, which, if learned, will result in modification of pupil behavior, mentally, physically, and socially, compose the unit. The definite statement of the modifications to purposes to effect gives the teacher definite outcomes for which to plan and check.

The delimitation.-- The delimitation is the "breaking up" of the subject matter into smaller concepts, skills or abilities which must be mastered to achieve the unit. This

---

[1] Course given by Dr. Roy O. Billett, "Unit Assignment in Secondary Education."

delimitation is usually stated in declarative sentences, which may be numbered consecutively.

The unit assignment.-- The unit assignment includes all those activities which lead to a mastery of the unit. These activities may include reading, writing, drawing, dramatics, singing and other forms of study and expression. The unit assignment includes all the means and methods by which the unit is achieved.

The study guide.-- One or more study sheets are furnished by the teacher to guide the pupil in achieving the unit. The study guide may include introductory atatements, explanations, questions, reading assignments and, in fact, any material which the teacher feels will help the student.

Optional activities.-- Suggested activities which may be selected by the pupil are listed in the card file. These activities are designed to help the pupil to master the unit. The optional activities are begun as soon as the required work is completed, and make use of the special interests, skills, abilities and initiative of the pupils in the further exploration of the unit. The optional activities may be initiated by the pupil with the approval of the teacher.

Class presentation period.-- After the completion of the required work and optional activities, the pupils present their findings, drawings, and the results of other activities to the class. A valuable part of this period

delimitation is usually stated in declarative sentences, which may be numbered consecutively.

The unit assignment.-- The unit assignment includes all those activities which lead to a mastery of the unit. These activities may include reading, writing, drawing, dramatics, singing and other forms of study and expression. The unit assignment includes all the means and methods by which the unit is achieved.

The study guide.-- One or more study sheets are furnished by the teacher to guide the pupil in achieving the unit. The study guide may include introductory statements, explanations, questions, reading assignments and, in fact, any material which the teacher feels will help the student.

Optional activities.-- Suggested activities which may be selected by the pupil are listed in the card file. These activities are designed to help the pupil to master the unit. The optional activities are begun as soon as the required work is completed, and make use of the special interests, skills, abilities and initiative of the pupils in the further exploration of the unit. The optional activities may be initiated by the pupil with the approval of the teacher.

Class presentation period.-- After the completion of the required work and optional activities, the pupils present their findings, drawings, and the results of other activities to the class. A valuable part of this period

is the opportunity for class discussion and comment.

Testing.-- Not all activities leading to the mastery of the unit can be measured by written examinations. In such cases the testing may be primarily inspection, observation, and skill in performance. The important concepts in most areas of knowledge can be tested through some form of objective tests.

Provision for individual differences.-- The unit assignment provides opportunity for the individual to master the unit at his own rate and at the level which his intelligence permits.

Time allotment.-- The time allotted to any given unit is always approximate, owing to the fact that individual differences in rates of learning and levels of ability will require modification of any stated time schedule.

Meaning of symbols.-- The letters (SG) in parenthesis in the unit assignment refer to the study guide sheet which is given to each pupil as an aid to the achieving of the unit. The number following the letters, as: (SG-7), indicates the number of the question, direction or explanation on the study guide sheet.

The asterisk (*) preceding any statement of concept, question, direction, or test item, is an indication that this item should be omitted for groups of slow learning ability. In this way, the delimitation of the unit, the

is the opportunity for class discussion and comment.

Testing.-- Not all activities leading to the mastery of the unit can be measured by written examinations. In such cases the testing may be primarily inspection, observation, and skill in performance. The important concepts in most areas of knowledge can be tested through some form of objective tests.

Provision for individual differences.-- The unit assignment provides opportunity for the individual to master the unit at his own rate and at the level which his intelligence permits.

Time allotment.-- The time allotted to any given unit is always approximate, owing to the fact that individual differences in rates of learning and levels of ability will require modification of any stated time schedule.

Meaning of symbols.-- The letters (SG) in parenthesis in the unit assignment refer to the study guide sheet which is given to each pupil as an aid to the achieving of the unit. The number following the letters, as: (SG-7), indicates the number of the question, direction or explanation on the study guide sheet.

The asterisk (*) preceding any statement of concept, question, direction, or test item, is an indication that this item should be omitted for groups of slow learning ability. In this way, the delimitation of the unit, the

unit assignment, and the test may be differentiated to meet the needs of various levels, at the same time allowing sufficient challenge for the more able pupils and eliminating the too difficult concepts and tasks from the work of the below average. Further differentiation is possible through the use of other symbols.

Suggestions to teachers are enclosed in parentheses.

The School

Organization.-- The junior high school in which these units were taught has a student population of approximately 1300. The physical equipment is modern throughout, and the program follows that of a standard junior high school, with all work departmentalized and opportunities for exploratory experiences in such fields as art, music, home economics, shops, and typewriting. Following the exploratory period, the pupil is allowed to choose elective subjects on the basis of previous success.

Data available.-- The school has the advantage of a well-organized guidance department. A counselor for each grade keeps in touch with every pupil during the years in junior high school. The counselor meets these pupils in occupational civics classes, which meet twice a week for a fifty-minute period. The counselor also assembles personal information concerning pupils, holds regular interviews, gives and records standardized tests, and keeps records of

unit assignment, and the text may be differentiated to meet the needs of various levels, at the same time allowing sufficient challenge for the more able pupils and eliminating the too difficult concepts and tasks from the work of the below average. Further differentiation is possible through the use of other symbols.

Suggestions to teachers are enclosed in parentheses.

The School

Organization.-- The junior high school in which these units were taught has a student population of approximately 1800. The physical equipment is modern throughout, and the program follows that of a standard junior high school, with all work departmentalized and opportunities for exploratory experiences in such fields as art, music, home economics, shops, and typewriting. Following the exploratory period, the pupil is allowed to choose elective subjects on the basis of previous success.

Data available.-- The school has the advantage of a well-organized guidance department. A counselor for each grade keeps in touch with every pupil during the years in junior high school. The counselor meets these pupils in occupational civics classes, which meet twice a week for a fifty-minute period. The counselor also assembles personal information concerning pupils, holds regular interviews, gives and records standardized tests, and keeps records of

achievement and progress in all phases of pupil growth.

These records are available to all teachers and thus it is possible for every teacher to know the abilities, interests, home backgrounds, and many of the personality traits of pupils in the group.

The community.-- The school is situated in a city of approximately 260,000 and in a section of that city which has a number of large mills and factories. In this respect it is a highly industrialized community. However, this particular factory center lies fairly near the outskirts of the city, and, whereas the streets are crowded, and many houses are in need of repair, the open country spaces are within comfortable walking distance of most residents in the community. Three distinct nationalities are represented in this school community. The Italian group predominates, with the Polish and the English-speaking groups in the minority.

The Class for Which These Units Were Organized

Classification.-- These units were planned for a group of 202 pupils in the second half of the seventh grade. The class is divided into five groups of different academic ability. The classification is based upon the intelligence quotient and scholastic achievement. The intelligence quotient is derived from scores on the Haggerty Delta II

achievement and progress in all phases of pupil growth.

These records are available to all teachers and thus it is possible for every teacher to know the abilities, interests, home backgrounds, and many of the personality traits of pupils in the group.

The community.-- The school is situated in a city of approximately 280,000 and in a section of that city which has a number of large mills and factories. In this respect it is a highly industrialized community. However, this particular factory center lies fairly near the outskirts of the city, and, whereas the streets are crowded, and many houses are in need of repair, the open country spaces are within comfortable walking distance of most residents in the community. Three distinct nationalities are represented in this school community. The Italian group predominates, with the Polish and the English-speaking groups in the minority.

The Class for Which These Units Were Organized

Classification.-- These units were planned for a group of 202 pupils in the second half of the seventh grade. The class is divided into five groups of different academic ability. The classification is based upon the intelligence quotient and scholastic achievement. The intelligence quotient is derived from scores on the Haggerty Delta II

Group Intelligence Examination given in Grade 6A. Intelligence Quotients are translated into Ability Ratings.[1/] The equivalents are as follows:

Intelligence Quotients		Ability Rating
120 and over	=	A
110 - 119	=	B
90 - 109	=	C
80 - 89	=	D
70 - 79	=	E

The range of the ability levels in a given group is narrowed by this classification, and the teacher is thus enabled to meet more adequately the needs represented in this group. A description of the various groups is presented here. The tables are included for the simple purpose of giving a more distinct picture of the group than would otherwise be possible. For this reason no attempt has been made to treat these distributions statistically.

Number of pupils in each group.-- The number of pupils in each of the five groups is as follows:

Group 1	- 42	Group 4	- 40
Group 2	- 43	Group 5	- 38
Group 3	- 39	Total	- 202

Chronological age.-- The range of chronological age in

1/ Richard D. Allen, Ph.D., Self-Measurement Projects in Group Guidance. Inor Publishing Company, New York, 1934, p. 253

Group Intelligence examination given in Grade 8A. Intelligence quotients are translated into ability ratings.[1] The equivalents are as follows:

Intelligence quotients		Ability rating
120 and over	=	A
110 - 119	=	B
90 - 109	=	C
80 - 89	=	D
70 - 79	=	E

The range of the ability levels in a given group is narrowed by this classification, and the teacher is thus enabled to meet more adequately the needs represented in this group. A description of the various groups is presented here. The tables are included for the simple purpose of giving a more distinct picture of the group than would otherwise be possible. For this reason no attempt has been made to treat these distributions statistically.

Number of pupils in each group.-- The number of pupils in each of the five groups is as follows:

Group 1	- 42	Group 4	- 42
Group 2	- 45	Group 5	- 38
Group 3	- 39	Total	- 206

Chronological age.-- The range of chronological age in

[1] Stanford D. Allen, Ph.D., Self-Measurement Projects in Group Guidance. Inor Publishing Company, New York, 1934, p. 264

the entire grade was 4 years and 4 months. (See Table 1)

Table 1. Distribution of Chronological Age in the Several Class Sections.

	Number of Pupils in Different Class Sections				
Age	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
11-6	2	0	0	0	0
11-7	0	0	0	0	0
11-8	2	1	0	0	0
11-9	2	0	0	0	0
11-10	0	2	0	0	0
11-11	0	0	0	0	0
12-0.....	3	0	1	0	0
12-1	2	0	1	0	0
12-2	4	1	0	0	0
12-3	3	0	1	0	0
12-4	5	2	1	0	0
12-5	5	3	1	1	0
12-6	5	5	2	2	0
12-7	1	4	2	1	0
12-8	5	2	3	0	0
12-9	3	5	0	2	0
12-10.....	0	3	4	0	0
12-11.....	0	3	2	2	0
13-0	0	1	4	1	0
13-1	0	2	2	1	2
13-2	0	2	2	2	3
13-3	0	0	0	1	0
13-4	0	1	2	1	2
13-5	0	1	0	3	1
13-6	0	0	0	3	0
13-7	0	2	2	3	1
13-8	0	0	1	0	2
13-9	0	0	0	1	0
13-10.....	0	0	1	0	0
13-11.....	0	1	1	3	4
14-0	0	1	0	3	1
14-1	0	0	0	0	2
14-2	0	0	1	1	0
14-3	0	0	0	2	1
14-4	0	0	1	0	0

the entire grade was 4 years and 4 months. (See Table I)

Table I. Distribution of Chronological Age in the Several Class Sections.

	Number of Pupils in Different Class Sections				
Age	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
11-6	2	0	0	0	0
11-7	0	0	0	0	0
11-8	2	1	0	0	0
11-9	2	0	0	0	0
11-10	0	2	0	0	0
11-11	0	0	0	0	0
12-0	3	0	1	0	0
12-1	2	0	1	0	0
12-2	4	1	0	0	0
12-3	3	0	1	0	0
12-4	5	2	1	0	0
12-5	5	3	1	1	0
12-6	5	3	2	2	0
12-7	1	4	2	1	0
12-8	0	2	3	0	0
12-9	3	3	0	2	0
12-10	0	3	4	0	0
12-11	0	3	2	2	0
13-0	0	1	4	1	0
13-1	0	2	2	1	2
13-2	0	2	2	2	3
13-3	0	0	0	1	0
13-4	0	1	2	1	2
13-5	0	1	0	3	1
13-6	0	0	0	3	0
13-7	0	2	2	3	1
13-8	0	0	1	0	2
13-9	0	0	0	1	0
13-10	0	0	1	0	0
13-11	0	1	1	3	4
14-0	0	1	0	3	1
14-1	0	0	0	0	2
14-2	0	0	1	1	0
14-3	0	0	0	2	1
14-4	0	0	1	0	0

Table 1. (concluded)

	Number of Pupils in Different Class Sections				
Age	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
14-5	0	1	1	0	0
14-6	0	0	0	1	1
14-7	0	0	0	1	1
14-8	0	0	0	0	2
14-9	0	0	0	0	1
14-10.....	0	0	1	1	2
14-11.....	0	0	0	0	2
15-0	0	0	0	2	2
15-1	0	0	1	0	0
15-2	0	0	0	0	1
15-3	0	0	0	0	2
15-4	0	0	1	0	0
15-5	0	0	0	0	1
15-6	0	0	0	0	0
15-7	0	0	0	1	1
15-8	0	0	0	0	1
15-9	0	0	0	1	1
15-10.....	0	0	0	0	1
Total	42	43	39	40	38

The youngest pupil was 11 years and 6 months, the oldest 15 years and 10 months. The wisdom of classification is evident from the age distribution in the various class sections. Grouping on the basis of mental ability necessarily involves the chronological age since the Intelligence Quotient is the result of dividing the mental age by the chronological age. Thus, the range of chronological age is materially reduced in each group, with increasing opportunity for meeting the needs of each group. Boys and girls

the entire grade was 4 years and 4 months. (See Table 1)

Table 1. Distribution of Chronological Age in the Several Class Sections.

	Number of Pupils in Different Class Sections					
Age	7A-1	7A-2	7A-3	7A-4	7A-5	
(1)	(2)	(3)	(4)	(5)	(6)	
11-6	2	0	0	0	0	
11-7	0	0	0	0	0	
11-8	2	1	0	0	0	
11-9	2	0	0	0	0	
11-10	0	2	0	0	0	
11-11	0	0	0	0	0	
12-0	3	0	1	0	0	
12-1	2	0	1	0	0	
12-2	4	1	0	0	0	
12-3	3	0	1	0	0	
12-4	5	2	1	0	0	
12-5	5	3	1	1	0	
12-6	5	5	3	2	0	
12-7	1	4	3	1	0	
12-8	3	2	3	0	0	
12-9	3	5	0	2	0	
12-10	0	3	4	0	0	
12-11	0	3	2	2	0	
13-0	0	1	4	1	0	
13-1	0	2	2	1	2	
13-2	0	2	2	2	3	
13-3	0	0	0	1	0	
13-4	0	1	2	1	2	
13-5	0	1	0	3	1	
13-6	0	0	0	3	0	
13-7	0	2	2	3	1	
13-8	0	0	1	0	2	
13-9	0	0	0	1	0	
13-10	0	0	1	0	0	
13-11	0	1	1	3	4	
14-0	0	1	0	3	1	
14-1	0	0	0	0	2	
14-2	0	0	1	1	0	
14-3	0	0	0	2	1	
14-4	0	0	1	0	0	

Table 1. (concluded)

	Number of Pupils in Different Class Sections				
Age	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
14-5	0	1	1	0	0
14-6	0	0	0	1	1
14-7	0	0	0	1	1
14-8	0	0	0	0	2
14-9	0	0	0	0	1
14-10.....	0	0	1	1	2
14-11.....	0	0	0	0	2
15-0	0	0	0	2	2
15-1	0	0	1	0	0
15-2	0	0	0	0	1
15-3	0	0	0	0	2
15-4	0	0	1	0	0
15-5	0	0	0	0	1
15-6	0	0	0	0	0
15-7	0	0	0	1	1
15-8	0	0	0	0	1
15-9	0	0	0	1	1
15-10.....	0	0	0	0	1
Total	42	43	39	40	38

The youngest pupil was 11 years and 6 months, the oldest 15 years and 10 months. The wisdom of classification is evident from the age distribution in the various class sections. Grouping on the basis of mental ability necessarily involves the chronological age since the Intelligence Quotient is the result of dividing the mental age by the chronological age. Thus, the range of chronological age is materially reduced in each group, with increasing opportunity for meeting the needs of each group. Boys and girls

Table I. (concluded)

Number of Pupils in Different Class Sections

Age	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
14-5	0	1	1	0	0
14-6	0	0	0	1	1
14-7	0	0	0	1	1
14-8	0	0	0	0	2
14-9	0	0	0	2	1
14-10.....	0	0	1	1	2
14-11.....	0	0	0	0	2
15-0	0	0	0	2	2
15-1	0	0	1	0	0
15-2	0	0	0	0	1
15-3	0	0	0	0	2
15-4	0	0	1	0	0
15-5	0	0	0	0	1
15-6	0	0	0	0	0
15-7	0	0	0	1	1
15-8	0	0	0	0	1
15-9	0	0	0	1	1
15-10.....	0	0	0	0	1
Total	42	43	39	40	39

The youngest pupil was 11 years and 6 months, the oldest 15 years and 10 months. The wisdom of classification is evident from the age distribution in the various class sections. Grouping on the basis of mental ability necessarily involves the chronological age since the intelligence quotient is the result of dividing the mental age by the chronological age. Thus, the range of chronological age is materially reduced in each group, with increasing opportunity for meeting the needs of each group. Boys and girls

of 11 years of age have rather different interests than those of 15 years, particularly if the older boy or girl is well developed physically and socially. Unit assignment makes provision for such diverse interests.

Ability ratings.-- Table 2 reveals the range of ability levels in each group. There is some overlapping, owing to the ability of some of the pupils of low rating to persevere and through continued application, achieve a greater measure of success in school work than would be expected. In group 1 the rating range is from A+ to C with a median rating of B. In group 5, the rating ranges from C to E with a median of E. Obviously such data call for differentiated unit planning.

Distribution of achievement goals.-- The goals referred to in Table 3 are in reality a picture of the mental ages of the members of the various groups. The normal mental age for the grade is 12.5. Such pupils would be expected to do average or C work. Pupils whose mental ages are above the grade norm would be able to do B work, if one year advanced, or A work if approximately two years above the normal mental age for the grade. Similarly D and E represent one and two years mental age below the grade. This table affords a slightly different distribution and indicates the necessity of attention to individual needs. The median achievement for group 1 would average B, and groups 2, 3, 4, and 5 in-

of 11 years of age have rather different interests than those of 15 years, particularly if the older boy or girl is well developed physically and socially. Unit assignment makes provision for such diverse interests.

Ability ratings.-- Table 2 reveals the range of ability levels in each group. There is some overlapping, owing to the ability of some of the pupils of low rating to persevere and through continued application, achieve a greater measure of success in school work than would be expected. In group 1 the rating range is from A+ to C with a median rating of B. In group 5, the rating ranges from C to E with a median of E. Obviously such data call for differentiated unit planning.

Distribution of achievement goals.-- The goals referred to in Table 3 are in reality a picture of the mental ages of the members of the various groups. The normal mental age for the grade is 12.5. Such pupils would be expected to do average or C work. Pupils whose mental ages are above the grade norm would be able to do B work, if one year advanced, or A work if approximately two years above the normal mental age for the grade. Similarly D and E represent one and two years mental age below the grade. This table affords a slightly different distribution and indicates the necessity of attention to individual needs. The median achievement for group 1 would average B, and groups 2, 3, 4, and 5 in-

dicate median achievement levels of C, C, E and E respectively.

Table 2. Distribution of Ability Levels According to Intelligence Quotients in the Several Class Sections.

Ability Levels	Number of Pupils in Different Ability Groups				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
A+	1	0	0	0	0
A	8	0	0	0	0
A-	1	0	0	0	0
B+	0	0	0	0	0
B	19	0	0	0	0
B-	0	0	0	0	0
C+	6	1	0	0	0
C	7	37	27	0	2
C-	0	4	0	5	0
D+	0	0	0	0	0
D	0	1	11	19	11
D-	0	0	0	0	0
E+	0	0	0	0	0
E	0	0	1	15	19
E-	0	0	0	1	6
Total	42	43	39	40	38

Nationality of parents.-- Table 4 shows the birthplace of the parents of the seventh grade pupils. This data is significant because it indicates the language problem facing the child in the foreign home, and, to some extent, depicts the customs and habits which form the background

dicate median achievement levels of C, C, B and E respectively.

Table 2. Distribution of Ability Levels According to Intelligence Quotients in the Several Class Sections.

Ability Levels	Number of Pupils in Different Ability Groups				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
A+	1	0	0	0	0
A	2	0	0	0	0
A-	1	0	0	0	0
B+	0	0	0	0	0
B	19	0	0	0	0
B-	0	0	0	0	0
C+	6	1	0	0	0
C	7	37	27	0	2
C-	0	4	0	5	0
D+	0	0	0	0	0
D	0	1	11	19	11
D-	0	0	0	0	0
E+	0	0	0	0	0
E	0	0	1	15	19
E-	0	0	0	1	6
Total	42	43	39	40	38

Nationality of parents.-- Table 4 shows the birthplace of the parents of the seventh grade pupils. This data is significant because it indicates the language problem facing the child in the foreign home, and, to some extent, depicts the customs and habits which form the background

of the pupils' experiences. As stated previously a greater number of Italian homes are represented than of any other nationality. In some cases, where parents (of Italian stock) were born in the United States, the pupils report Italian spoken in the home.

Table 3. Distribution of Achievement Goals in the Several Class Sections

Achievement Goals	Number of Pupils in Each Group				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
A+	1	0	0	0	0
A	11	1	1	0	0
A-	0	0	0	0	0
B+	0	0	0	0	0
B	17	0	3	0	0
B-	0	0	0	0	0
C+	0	3	0	0	0
C	13	26	20	7	3
C-	0	0	0	1	0
D+	0	0	0	0	0
D	0	12	11	8	16
D-	0	0	0	0	0
E+	0	0	0	0	0
E	0	0	24	22	16
E-	0	0	0	2	3
Total	42	43	39	40	38

Number of children in the family.-- The number of children in the family as indicated in Table 5 is important because it gives a clearer picture of the social situation

number of Italian homes are represented than of any other nationality. In some cases, where parents (of Italian stock) were born in the United States, the pupils report Italian spoken in the home.

Table 5. Distribution of Achievement Goals in the Several Class Sections

Achievement Goals	Number of Pupils in Each Group				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
A+	1	0	0	0	0
A	11	1	1	0	0
A-	0	0	0	0	0
B+	0	0	0	0	0
B	17	0	3	0	0
B-	0	0	0	0	0
C+	0	3	0	0	0
C	13	26	20	7	3
C-	0	0	0	1	0
D+	0	0	0	0	0
D	0	12	11	5	16
D-	0	0	0	0	0
E+	0	0	0	0	0
E	0	0	24	22	18
E-	0	0	0	2	5
Total	42	43	39	40	32

Number of children in the family.-- The number of children in the family as indicated in Table 5 is important because it gives a clearer picture of the social situation

Table 4. Distribution of Pupils in the Different Class Sections According to the Birthplace of Parents.

Birthplace of Parents	Number of Pupils in the Different Groups				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
United States-United States.	20	14	9	8	3
United States-Italy.....	6	7	2	7	4
United States-Poland.....	2	2	0	0	2
United States-Canada.....	0	2	0	1	0
United States-Ireland.....	0	1	0	1	1
United States-England.....	0	0	0	1	1
Italy-Italy.....	9	11	25	22	20
Poland-Poland.....	2	2	1	0	3
Canada-Canada.....	0	2	2	0	0
England-England.....	0	1	0	0	0
Austria-Austria.....	1	0	0	0	0
Russia-Russia.....	1	0	0	0	1
England-Wales.....	1	0	0	0	1
Canada-Italy.....	0	0	0	0	1
Brazil-Italy.....	0	1	0	0	2
Total	42	42	39	40	38

Table 4. Distribution of Pupils in the Different Class Sections according to the Birthplace of Parents.

Birthplace of Parents	Number of Pupils in the Different Groups				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
United States- United States.	20	14	9	8	3
United States- Italy.....	6	7	2	7	4
United States- Poland.....	2	2	0	0	2
United States- Canada.....	0	2	0	1	0
United States- Ireland.....	0	1	0	1	1
United States- England.....	0	0	0	1	1
Italy- Italy.....	8	11	26	22	20
Poland- Poland.....	2	2	1	0	3
Canada- Canada.....	0	2	2	0	0
England- England.....	0	1	0	0	0
Austria- Austria.....	1	0	0	0	0
Russia- Russia.....	1	0	0	0	1
England- Wales.....	1	0	0	0	1
Canada- Italy.....	0	0	0	0	1
Brazil- Italy.....	0	1	0	0	2
Total	42	42	39	40	39

in the home. The number of children has a direct bearing on the economic status of the family and the opportunity for further education afforded each child. This information becomes more significant with further study of the income

Table 5. Number of Children in the Different Families Represented in the Class Sections.

Number of Children in Family	Number of Pupils in Each Group				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
1	5	2	1	1	0
2	9	8	2	1	3
3	17	16	9	8	6
4	3	6	7	7	8
5	3	5	2	8	4
6	2	2	0	2	8
7	1	1	5	5	3
8	1	1	4	3	3
9	1	1	4	2	2
10	0	0	1	3	0
11	0	0	2	0	0
State Ward	0	1	2	0	1
Total	42	43	39	40	38

and cultural background of the home, and is offered here as only one factor deserving of attention in forming a picture of the class studied.

Occupations of fathers and mothers.-- A study of the occupational status of the principal wage earner in each home shows that the income in most homes is comparatively low. The largest number are engaged in mill work, and are no

in the home. The number of children has a direct bearing on the economic status of the family and the opportunity for further education afforded each child. This information becomes more significant with further study of the income

Table 5. Number of Children in the Different Families Represented in the Class Sections.

Number of Children in Family	Number of Pupils in Each Group				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
1	5	2	1	1	0
2	9	9	3	1	3
3	17	16	9	8	6
4	3	6	7	7	8
5	3	5	2	8	4
6	2	2	0	2	3
7	1	1	5	5	3
8	1	1	4	3	3
9	1	1	4	2	2
10	0	0	1	3	0
11	0	0	2	0	0
State Ward	0	1	2	0	1
Total	42	43	39	40	38

and cultural background of the home, and is offered here as only one factor deserving of attention in forming a picture of the class studied.

Occupations of fathers and mothers.-- A study of the occupational status of the principal wage earner in each home shows that the income in most homes is comparatively low. The largest number are engaged in mill work, and are no

doubt employed in the immediate vicinity. There is a wide range of occupations, comparatively few of which are on the skilled level. To the teacher such a study indicates the type of occupational information which we may expect these pupils to understand. It is of interest here that eleven parents are engaged in so-called agricultural occupations, representing poultry, dairying and gardening work. The occupations of the mothers in most cases raises a problem in the home, for many of the children of such homes do practically all the housework, prepare the meals, and are responsible for the care of younger children. A knowledge of such situations necessitates some adjustment in school work. The Unit-Assignment Method with its possibilities for differentiating work helps to meet the needs of these individuals. Still another type of problem is that raised by the loss of one parent. Where the principal wage earner is unemployed, the disappointment and consequent loss of morale is sure to be reflected in the child's outlook.

Reading ability of the pupils.-- The reading level of boys and girls was determined in the 7B grade through scores on the Metropolitan Reading Test for grades 7 and 8. The results are shown in Table 6. The grade equivalents serve to indicate very clearly the number above the 7B grade level and also those below. Reading ability is an important factor in school achievement, and differentiation of reading assignments is readily made through the Unit-Assignment

doubt employed in the immediate vicinity. There is a wide range of occupations, comparatively few of which are on the skilled level. To the teacher such a study indicates the type of occupational information which we may expect these pupils to understand. It is of interest here that eleven parents are engaged in so-called agricultural occupations, representing poultry, dairying and gardening work. The occupations of the mothers in most cases raises a problem in the home, for many of the children of such homes do practically all the housework, prepare the meals, and are responsible for the care of younger children. A knowledge of such situations necessitates some adjustment in school work. The Unit-Assignment Method with its possibilities for differentiating work helps to meet the needs of these individuals. Still another type of problem is that raised by the loss of one parent. Where the principal wage earner is unemployed, the disappointment and consequent loss of morale is sure to be reflected in the child's outlook.

Reading ability of the pupils.-- The reading level of boys and girls was determined in the VB grade through scores on the Metropolitan Reading Test for grades V and G. The results are shown in Table 6. The grade equivalents serve to indicate very clearly the number above the VB grade level and also those below. Reading ability is an important factor in school achievement, and differentiation of reading assignments is readily made through the Unit-Assignment

Table 6. Distribution of Reading Scores and Grade Levels in Reading of Pupils in Different Class Sections.

Score on Reading Test	Grade Level in Reading	Number of Pupils in Each Group				
		7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)	(7)
67-67						
65-66						
63-64	9.3-	2				
61-62	8.9-9.2	2				
59-60	8.7-8.8	2	1			
57-58	8.5-8.6	2	0	1		
55-56	8.3-8.4	3	1	1		
53-54	7.10-8.1	8	6	1		
51-52	7.8-7.9	8	5		2	
49-50	7.5-7.6	6	4	3	1	1
47-48	7.3-7.4	3	5	2	5	2
45-46	7.1-7.2	3	8	4	5	1
43-44	6.9-6.10		6	1	4	1
41-42	6.7-6.8		3	7	0	6
39-40	6.5-6.6		4	6	10	2
37-38	6.3-6.4			6	0	5
35-36	6.1-6.2			1	9	6
33-34	5.9-5.10			4	1	4
31-32	5.7-5.8			1	3	5
29-30	5.5-5.6					1
27-28	5.3-5.4					
Number not tested		2	0	1	0	4
Total		42	43	39	40	38
Median Interval		51-52	47-48	41-42	39-40	35-36
Median Grade Level		7.8-7.9	7.3-7.4	6.7-6.8	6.5-6.6	6.1-6.2
Lowest Grade Level		7.1	6.3	5.7	5.6	5.5
Highest Grade Level		9.3	8.8	8.6	8.4	7.6
Range of Grade Levels		2.2	2.5	2.9	2.8	2.1

Table 6. Distribution of Reading Scores and Grade Levels in Reading of Pupils in Different Class Sections.

Score on Reading Test	Grade Level in Reading	Number of Pupils in Each Group				
		7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)	(7)
67-67						
65-66						
63-64	9.3-	2				
61-62	8.9-9.2	2				
59-60	8.7-8.8	2	1			
57-58	8.5-8.6	2	0	1		
55-56	8.3-8.4	3	1	1		
53-54	7.10-8.1	3	0	1		
51-52	7.8-7.9	3	3		2	
49-50	7.6-7.8	6	4	3	1	1
47-48	7.3-7.4	3	3	2	3	2
45-46	7.1-7.2	3	3	4	3	1
43-44	6.9-6.10		3	1	4	1
41-42	6.7-6.8		3	7	0	3
39-40	6.5-6.6		4	6	10	2
37-38	6.3-6.4			3	0	3
35-36	6.1-6.2			1	2	3
33-34	5.9-5.10			4	1	4
31-32	5.7-5.8			1	3	3
29-30	5.5-5.6					1
27-28	5.3-5.4					
Number not tested		2	0	1	0	4
Total		42	43	39	40	38
Median Interval		31-32	47-48	41-42	39-40	35-36
Median Grade Level		7.8-7.9	7.3-7.4	6.7-6.8	6.8-6.9	6.1-6.2
Lowest Grade Level		7.1	6.3	5.7	5.3	3.5
Highest Grade Level		9.3	8.9	8.6	8.4	7.6
Range of Grade Levels		2.2	2.6	2.9	3.1	4.1

Method. Indeed, the unit assignment may be so constructed that a minimum use of reading tasks and a maximum use of visual aids and manual work will be the means of achieving the unit.

The range of reading grades is of particular significance. In the entire grade the lowest was 5.6 and the highest 9.3, a range of 3 years and 9 months. The classification reduced this range considerably. It is obvious that the individual whose reading grade is 5.6 will find too difficult to complete the same requirements as the pupil of 9.3 reading grade. The Unit-Assignment Method makes possible differentiation and enrichment.

Out-of-school activities.-- Table 7 shows the range of out-of-school activities for a certain proportion of the pupils. The majority reported home and school tasks only. The second largest number mentioned sports next. This apparently includes all types of outdoor recreation. A third favorite was reading. Swimming in co-operation with the Community Boys' Club was also popular. Very few engaged in the remaining activities, although a fairly large number of separate activities are mentioned. The knowledge of hobbies, interests and recreational activities will aid the teacher in building unit assignments and, particularly optional activities. The utilizing of such interests always means more effective teaching.

Method. Indeed, the unit assignment may be so constructed that a minimum use of reading tasks and a maximum use of visual aids and manual work will be the means of achieving the unit.

The range of reading grades is of particular significance. In the entire grade the lowest was 3.0 and the highest 9.0, a range of 3 years and 9 months. The classification reduced this range considerably. It is obvious that the individual whose reading grade is 3.0 will find too difficult to complete the same requirements as the pupil of 9.0 reading grade. The Unit-Assignment Method makes possible differentiation and enrichment.

Out-of-school activities.-- Table 7 shows the range of out-of-school activities for a certain proportion of the pupils. The majority reported home and school tasks only. The second largest number mentioned sports next. This apparently includes all types of outdoor recreation. A third favorite was reading. Swimming in co-operation with the Community Boys' Club was also popular. Very few engaged in the remaining activities, although a fairly large number of separate activities are mentioned. The knowledge of hobbies, interests and recreational activities will aid the teacher in building unit assignments and, particularly co-ional activities. The utilizing of such interests always means more effective teaching.

Table 7. Out of School Activities Listed by Pupils in Different Class Sections.

Out of School Activities	Number in Each Group Reporting Activity				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
Reading	9	13	10	6	8
Radio	0	0	2	0	2
Church Choir	1	1	2	1	0
Church Society	0	0	1	1	1
Care of Children	0	1	2	2	2
Moving Pictures	0	2	0	0	0
Sports	7	14	12	16	5
Papers	0	2	0	1	0
Girl Scouts	1	0	1	0	0
Store	0	0	0	1	1
Sewing	1	0	3	2	3
Basket Ball	0	0	1	4	0
Boxing Club	0	0	1	1	0
Boy Scouts	0	0	1	1	0
Boys' Club	3	0	3	4	7
Swimming	2	0	1	6	0
Clarinet	0	0	2	1	0
Piano	3	0	2	1	1
Woodwork	2	0	1	0	0
"Gang" Club	0	0	1	1	2
Poultry	0	0	1	0	0
Drum Major	0	0	0	1	0
Gardening	0	0	0	1	0
Nickerson House Clubs	2	3	1	2	2
Pool Room helper	0	0	0	1	0
Harmonica	0	0	0	1	0
Garage work	0	0	0	1	0
Wood club	0	0	0	0	1
Works with uncle	0	0	0	0	1
Chops wood	0	0	0	0	2
Electricity	0	0	0	0	1
Cooking	2	0	0	0	1
Orchestra	1	0	0	0	0
Guitar	2	0	0	0	0
Knitting	1	0	0	0	0
Library Assistants	2	2	0	0	0
Polish School	1	2	1	1	2
Collecting Pictures	3	0	0	0	0
School of Design	1	0	0	0	0

Table V. Out of School Activities Listed by Pupils in Different Class Sections.

Out of School Activities	Number in Each Group Reporting Activity				
	7A-1	7A-2	7A-3	7A-4	7A-5
(1)	(2)	(3)	(4)	(5)	(6)
Reading	9	13	10	6	8
Radio	0	0	2	0	2
Church Choir	1	1	2	1	0
Church Society	0	0	1	1	1
Care of Children	0	1	2	2	2
Moving Pictures	0	2	0	0	0
Sports	7	14	12	16	5
Papers	0	2	0	1	0
Girl Scouts	1	0	1	0	0
Store	0	0	0	1	1
Sewing	1	0	3	2	3
Basket Ball	0	0	1	4	0
Boxing Club	0	0	1	1	0
Boy Scouts	0	0	1	1	0
Boys' Club	3	0	3	4	7
Swimming	2	0	1	6	0
Clarinet	0	0	2	1	0
Piano	2	0	2	1	1
Woodwork	2	0	1	0	0
"Gang" Club	0	0	1	1	2
Poultry	0	0	1	0	0
Drum Major	0	0	0	1	0
Gardening	0	0	0	1	0
Hickerson House Clubs	2	3	1	2	2
Pool Room Helper	0	0	0	1	0
Harmonica	0	0	0	1	0
Garage work	0	0	0	1	0
Food club	0	0	0	0	1
Works with uncle	0	0	0	0	1
Chops wood	0	0	0	0	2
Electricity	0	0	0	0	1
Cooking	2	0	0	0	1
Orchestra	1	0	0	0	0
Guiter	2	0	0	0	0
Knitting	1	0	0	0	0
Library Assistants	2	2	0	0	0
Polish School	1	2	1	1	2
Collecting Pictures	2	0	0	0	0
School of Design	1	0	0	0	0

All the personal ability, and achievement data than can be collected concerning the pupil will make possible greater adaptation to individual needs in planning and teaching the unit.

A Discussion of the Units and

Unit Assignments Submitted

Purpose.-- The units in this study are planned for classes in occupations. Before the end of the junior high school period, the pupils will have had an opportunity to survey the various occupational fields. These units are intended for such a survey of the field of agriculture. The emphasis has been on knowledge and appreciation of the service rendered rather than on the problem of choosing a vocation.

Selection.-- The first unit deals with general information concerning the changes in farm life which have come with the machine age, and the ways in which the government gives needed assistance to the farmer. This unit also includes an outline by which an occupation may be analyzed. This outline is later applied in analyzing the various aspects of the agricultural occupations. The second and third units deal with market gardening and dairying, and were selected because of their importance in our local community. The remaining units are concerned with other types of specialized agriculture. These units include simple concepts with a minimum amount of supporting data.

All the personal ability, and achievement data than can be collected concerning the pupil will make possible greater adaptation to individual needs in planning and teaching the unit.

A Discussion of the Units and Unit Assignments Submitted

Purpose.-- The units in this study are planned for classes in occupations. Before the end of the junior high school period, the pupils will have had an opportunity to survey the various occupational fields. These units are intended for such a survey of the field of agriculture. The emphasis has been on knowledge and appreciation of the service rendered rather than on the problem of choosing a vocation.

Selection.-- The first unit deals with general information concerning the changes in farm life which have come with the machine age, and the ways in which the government gives needed assistance to the farmer. This unit also includes an outline by which an occupation may be analyzed. This outline is later applied in analyzing the various aspects of the agricultural occupations. The second and third units deal with market gardening and dairying, and were selected because of their importance in our local community. The remaining units are concerned with other types of specialized agriculture. These units include simple concepts with a minimum amount of supporting data.

Required Units.-- The first unit provides a background of understanding of farm life and problems necessary for further study. In the second and third units the pupils apply the knowledge gained and also the method of analyzing an occupation in the careful study of two important local workers, the market gardener and dairyman. For these reasons Units I, II and III are studied by every pupil.

The place of group work.-- The field of agriculture is so broad that not all occupations in this field may be given the same attention by every pupil. On the other hand, to omit all other occupations would give a most inadequate picture. For this reason the group plan has been chosen. The class is divided into seven groups with approximately six members in each group. The pupils select the unit in which they are most interested and organize a study group. Guide sheets are furnished to members of each group. The teacher moves from group to group giving assistance where needed. The members choose optional activities as soon as the required is accomplished. During the class presentation period, each group is responsible for presenting the information gained to the class. In this way, the small group of pupils make a study of a unit and share the results with all other groups. Only those in the smaller group are to be tested on the unit studied. The group procedure thus makes possible the study of the most important types of specialized

Required Units.-- The first unit provides a background of understanding of farm life and problems necessary for further study. In the second and third units the pupils apply the knowledge gained and also the method of analyzing an occupation in the careful study of two important local workers, the market gardener and dairyman. For these reasons Units I, II and III are studied by every pupil.

The place of group work.-- The field of agriculture is so broad that not all occupations in this field may be given the same attention by every pupil. On the other hand, to omit all other occupations would give a most inadequate picture. For this reason the group plan has been chosen. The class is divided into seven groups with approximately six members in each group. The pupils select the unit in which they are most interested and organize a study group. Guide sheets are furnished to members of each group. The teacher moves from group to group giving assistance where needed. The members choose optional activities as soon as the required is accomplished. During the class presentation period, each group is responsible for presenting the information gained to the class. In this way, the small group of pupils make a study o a unit and share the results with all other groups. Only those in the smaller group are to be tested on the unit studied. The group procedure thus makes possible the study of the most important types of specialized

agriculture. Units IV to X were designed for group work.

Lack of information in textbooks.-- The teacher of occupations in the field of agriculture faces two distinct problems. The first is that of obtaining reference books in the classroom that will be adequate in the amount of information offered. Any books now in use devote possibly one or two paragraphs to specialized agricultural work. Some books fail to fail to mention many of these farm occupations. The pupils must be taught to do some simple research work in using library books, government pamphlets, stories, and pictures to obtain the desired information.

Vocabulary.-- A second problem is that of finding books suitable for seventh-grade boys and girls. Most occupational books are written for the ninth or tenth grade with the result that the vocabulary and style are far beyond the comprehension of the twelve-year old children. The teacher's task thus includes the building up of an adequate vocabulary and individual assistance in getting information from the printed page.

The need for many references.-- The scarcity of textbooks which meet the needs of a course in occupations in agriculture can be overcome to some extent by using library resources and current periodicals. For this reason, the writer has listed a number of books, only some of which are available in regular junior high school classrooms. Several of these books

agriculture. Units IV to X were designed for group work.

Lack of information in textbooks.-- The teacher of occupations in the field of agriculture faces two distinct problems. The first is that of obtaining reference books in the classroom that will be adequate in the amount of information offered. Any books now in use devote possibly one or two paragraphs to specialized agricultural work. Some books fail to fail to mention many of these farm occupations. The pupils must be taught to do some simple research work in using library books, government pamphlets, stories, and pictures to obtain the desired information.

Vocabulary.-- A second problem is that of finding books suitable for seventh-grade boys and girls. Most occupational books are written for the ninth or tenth grade with the result that the vocabulary and style are far beyond the comprehension of the twelve-year old children. The teacher's task thus includes the building up of an adequate vocabulary and individual assistance in getting information from the printed page.

The need for many references.-- The scarcity of textbooks which meet the needs of a course in occupations in agriculture can be overcome to some extent by using library resources and current periodicals. For this reason, the writer has listed a number of books, only some of which are available in regular junior high school classrooms. Several of these books

are found only in the library and must be loaned for a limited time. Magazines, clippings from newspapers, and bulletins offer valuable information which may help to keep the discussion up to date. Where important items of information are difficult to locate, the teacher imparts such information orally.

Increasing the vocabulary.-- The delimitations and unit assignments have been written in simple language which boys and girls of the seventh-grade from foreign-speaking homes can understand. Words that should be added to a seventh-grade vocabulary are underlined. Understanding the meaning of these words, and the ability to use them, are important learning products, and prepare the pupils for more effective use of textbooks.

Use of visual aids.-- The concepts necessary to understand a textbook discussion on agriculture are so many and varied that the use of pictures in representing these concepts is both advisable and necessary. Since agriculture touches practically every phase of living, the sources of pictorial material are many. Any difficulties encountered in obtaining pictures, graphs, slides, films, cartoons, or any other forms of concrete illustration are more than repaid when increased understanding of the unit is the result. The use of visual aids is highly recommended.

Revision.-- The units as presented are a revised form

are found only in the library and must be loaned for a limited time. Magazines, clippings from newspapers, and bulletins offer valuable information which may help to keep the discussion up to date. Where important items of information are difficult to locate, the teacher imparts such information orally.

Increasing the vocabulary.-- The definitions and unit assignments have been written in simple language which boys and girls of the seventh-grade from foreign-speaking homes can understand. Words that should be added to a seventh-grade vocabulary are underlined. Understanding the meaning of these words, and the ability to use them, are important learning products, and prepare the pupils for more effective use of textbooks.

Use of visual aids.-- The concepts necessary to understand a textbook discussion on agriculture are so many and varied that the use of pictures in representing these concepts is both advisable and necessary. Since agriculture touches practically every phase of living, the sources of pictorial material are many. Any difficulties encountered in obtaining pictures, graphs, slides, films, cartoons, or any other forms of concrete illustration are more than repaid when increased understanding of the unit is the result. The use of visual aids is highly recommended.

Revision.-- The units as presented are a revised form

of the units actually taught. After further experimentation with these units, more revision will be advisable. At no time may we find that the units actually fit the situation perfectly. No two classes or groups are alike. Constant revision serves to make teaching more effective and efficient.

Time allotment.-- The approximate time allotment for each unit follows the statement of the unit and precedes the unit assignment. Unit I is planned for ten, fifty-minute periods, two days a week. Units II and III each require six periods or three weeks. Units for group work will need from six to eight periods, although even more time may be necessary in order to plan for the class presentations of the various groups.

Testing.-- A mastery test has been submitted for each unit. The completion type and multiple choice type of objective test were selected because they seemed best suited to these units, in respect to concepts covered and ease in scoring. A pretest covering the important concepts of the required first three units is included. Keys to the tests will be found in the Appendix.

Lists of references for pupil use.-- A reference list including those books, pamphlets, and magazines which the pupil may consult for information is included in the unit assignment. To avoid frequent repetition these references

of the units actually taught. After further experimentation with these units, more revision will be advisable. At no time may we find that the units actually fit the situation perfectly. No two classes or groups are alike. Constant revision serves to make teaching more effective and efficient.

Time allotment.-- The approximate time allotment for each unit follows the statement of the unit and precedes the unit assignment. Unit I is planned for ten, fifty-minute periods, two days a week. Units II and III each require six periods or three weeks. Units for group work will need from six to eight periods, although even more time may be necessary in order to plan for the class presentations of the various groups.

Testing.-- A mastery test has been submitted for each unit. The completion type and multiple choice type of objective test were selected because they seemed best suited to these units, in respect to concepts covered and ease in scoring. A pretest covering the important concepts of the required first three units is included. Keys to the tests will be found in the Appendix.

Lists of references for pupil use.-- A reference list including those books, pamphlets, and magazines which the pupil may consult for information is included in the unit assignment. To avoid frequent repetition these references

are designated by numbers. For example, Brewer, John M., Occupations, Ginn and Com. 1936, is second on the reading list. On the study guide, the reference is indicated thus: (2) p.150 - 162.

Bibliography.-- Books and articles which have been of particular help to the writer are listed under a separate heading entitled Bibliography.

are designated by numbers. For example; Brewer, John M., Occupations. Ginn and Com. 1926; is second on the reading list. On the study guide, the reference is indicated thus: (2) p.150 - 152.

Bibliography.-- Books and articles which have been of particular help to the writer are listed under a separate heading entitled Bibliography.

CHAPTER II

OUR CHANGING FARM LIFE

The Unit

The workers in the field of agriculture furnish us with the raw materials from which we gain food, clothing and a large part of our shelter. For this reason, agriculture is truly basic to our modern ways of living. Indeed, the story of civilization parallels that of the development of farming and all its branches.

Since all groups of workers must depend on all others for the necessities of life, it is important that each group learns something of the tasks, the requirements and rewards of every occupational group - for only through knowledge can people live together well in harmony and understanding.

As in all other fields, agriculture has given way to specialization. Each branch of farming has much in common with other divisions, but there are also many differences which require special training, talent and equipment.

To encourage and promote scientific agriculture the government has established so-called Land Grant Colleges. Through these, as well as the other Federal, State and local agencies, the government renders an ever increasing number of services to the general and specialist farmer

CHAPTER II

OUR CHANGING FARM LIFE

The Unit

The workers in the field of agriculture furnish us with the raw materials from which we gain food, clothing and a large part of our shelter. For this reason, agriculture is truly basic to our modern ways of living. Indeed, the story of civilization parallels that of the development of farming and all its branches.

Since all groups of workers must depend on all others for the necessities of life, it is important that each group learns something of the tasks, the requirements and rewards of every occupational group - for only through knowledge can people live together well in harmony and understanding.

As in all other fields, agriculture has given way to specialization. Each branch of farming has much in common with other divisions, but there are also many differences which require special training, talent and equipment.

To encourage and promote scientific agriculture the government has established so-called Land Grant Colleges. Through these, as well as the other Federal, State and local agencies, the government renders an ever increasing number of services to the general and specialist farmer

alike.

The problems of the agricultural group of our nation are great, in spite of all aids, and the solution of these problems must depend upon (a) scientific study; (b) group co-operation; (c) sincere spirit of service.

(Approximate time allotment - ten periods)

Delimitation of Unit I

1. The agricultural worker produces raw materials.

2. These materials are used in food, shelter, clothing and many other ways.

3. Food, shelter and clothing are necessary to life. Indeed, we may say that the work of agriculture is basic to our modern ways of living.

4. Thousands of years ago man learned to hunt, fish, raise cattle, and later to till the soil.

*5. Agriculture changed the habits of the ancient nomads to more settled ways of living.

*6. This brought about experimentation, greater security, and the necessity for planning ahead - with a chance to improve previous attempts at production.

7. Up to about 1850 - farming showed little improvement over ancient methods. Soon after 1800 a series of inventions began to revolutionize agriculture. Through the introduction of (a) the grain cradle, (b) the cast iron plow, (c) the threshing machine, (d) the reaper, (e) the planting and cul-

alike.

The problems of the agricultural group of our nation are great. In spite of all aids, and the solution of these problems must depend upon (a) scientific study; (b) group co-operation; (c) sincere spirit of service.

(Approximate time allotment - ten periods)

Delimitation of Unit I

1. The agricultural worker produces raw materials.

2. These materials are used in food, shelter, clothing and many other ways.

3. Food, shelter and clothing are necessary to life. Indeed, we may say that the work of agriculture is basic to our modern ways of living.

4. Thousands of years ago man learned to hunt, fish, raise cattle, and later to till the soil.

5. Agriculture changed the habits of the ancient nomads to more settled ways of living.

6. This brought about experimentation, greater security, and the necessity for planning ahead - with a chance to improve previous attempts at production.

7. Up to about 1850 - farming showed little improvement over ancient methods. Soon after 1800 a series of inventions began to revolutionize agriculture. Through the introduction of (a) the grain cradle, (b) the cast iron plow, (c) the threshing machine, (d) the reaper, (e) the planting and cul-

tivating machine and other devices which are labor saving, the total hours of labor per acre for planting, cultivating and harvesting has greatly decreased.

8. The farmer of today need not be isolated. Through the radio he can tune in on the latest market reports, and hear discussions on topics of public interest. Programs of music and drama add greatly to his enjoyment in leisure hours.

9. Electrical labor-saving devices have removed much of the drudgery within the home as well as on the fields.

10. The automobile has drawn communities and markets close to the farmer, widening opportunities for social life, recreation, co-operative enterprise, and business contacts.

11. The problem of rural education has been partly solved through transportation by bus over good roads to a consolidated school.

*12. The changing living conditions and the scientific aspect should challenge young people to stay on the farm.

Agriculture has become highly specialized, even though the number of "general farmers" still outnumbers all others. Yet, even general farmers tend to produce those crops or products with which they have had the greatest success.

Single crop farming has proved less advantageous than more diversified farming. Loss through erosion, impoverished soils, plant diseases and insect pests may leave the

tivating machine and other devices which are labor saving. the total hours of labor per acre for planting, cultivating and harvesting has greatly decreased.

8. The farmer of today need not be isolated. Through the radio he can tune in on the latest market reports, and hear discussions on topics of public interest. Programs of music and drama add greatly to his enjoyment in leisure hours.

9. Electrical labor-saving devices have removed much of the drudgery within the home as well as on the fields.

10. The automobile has drawn communities and markets close to the farmer, widening opportunities for social life, recreation, co-operative enterprise, and business contacts.

11. The problem of rural education has been partly solved through transportation by bus over good roads to a consolidated school.

12. The changing living conditions and the scientific aspect should challenge young people to stay on the farm.

Agriculture has become highly specialized. even though the number of "general farmers" still outnumbers all others. Yet, even general farmers tend to produce those crops or products with which they have had the greatest success.

Single crop farming has proved less advantageous than more diversified farming. Loss through erosion, impoverished soils, plant diseases and insect pests may leave the

single crop farmer bankrupt.

On the whole, the farmer enjoys greater independence than does the city worker. The most undesirable aspect in all branches of farming is the risk of loss through weather and disease. The modern farmer stresses scientific and business like methods. The best preparation for the modern farmer is a four year course at the State College.

13. Some of the more common branches of agriculture are: (1) dairying, (2) poultry farming, (3) fruit growing, (4) market gardening, (5) nursery work, (6) florist, (7) gardening, (8) landscape gardening, (9) cattle raising, (10) bee culture, (11) forestry.

14. Within these groups further specialization may be carried on. For example: fruit farmers may raise only apples; poultry farmers may raise ducks; stock farmers may devote all their time to sheep raising.

15. The government has been particularly helpful to farmers.

16. Soon after the Civil War each state was given a tract of land in the Far West, to be used for, or the proceeds used for, the erection of an agricultural college, or the addition of agricultural courses to existing colleges. The size of the land grant depended upon the number of Congressional Representatives and senators. The bill was introduced by Senator Morrill. Therefore the State Agricul-

single crop farmer bankrupt.

On the whole, the farmer enjoys greater independence than does the city worker. The most undesirable aspect in all branches of farming is the risk of loss through weather and diseases. The modern farmer stresses scientific and business like methods. The best preparation for the modern farmer is a four year course at the State College.

13. Some of the more common branches of agriculture are: (1) dairying, (2) poultry farming, (3) fruit growing, (4) market gardening, (5) nursery work, (6) florist, (7) gardening, (8) landscape gardening, (9) cattle raising, (10) bee culture, (11) forestry.

14. Within these groups further specialization may be carried on. For example: fruit farmers may raise only apples; poultry farmers may raise ducks; stock farmers may devote all their time to sheep raising.

15. The government has been particularly helpful to farmers.

16. Soon after the Civil War each state was given a tract of land in the Far West, to be used for, or the proceeds used for, the erection of an agricultural college, or the addition of agricultural courses to existing colleges. The size of the land grant depended upon the number of Congressional Representatives and senators. The bill was introduced by Senator Morrill. Therefore the State Agricul-

tural Colleges are known as "Land Grant Colleges."

17. The agricultural colleges have become centers for various agencies, experiment stations, short unit courses, demonstrations, and important bulletins on scientific farming. State Colleges offer four year courses in Agriculture.

Fairs make it possible to meet others in the same work and exchange ideas.

18. The United States Department of Agriculture offers a wealth of information on all farming problems. The State Department of Agriculture sends out bulletins, sponsors radio addresses, newspaper articles, assists in arranging Fairs, and in other ways provides help for the farmer. The Department of Agriculture was first inaugurated by President Lincoln.

19. The 4-H Clubs - with classes and contests, spread the scientific ideas among the younger people and give training in group co-operation. One of the most well known Farmers' Organizations is the Grange.

20. The Farm Ceoperative has as its purpose the co-operative buying and selling in order to distribute profits and lower costs.

*21. About 1 per cent of the people in Rhode Island are engaged in farming but 40.9 per cent of the land area of the State is devoted to agriculture.

tural Colleges are known as "Land Grant Colleges."

17. The agricultural colleges have become centers for various agencies, experiment stations, short unit courses, demonstrations, and important bulletins on scientific farming. State Colleges offer four year courses in Agriculture.

Fairs make it possible to meet others in the same work and exchange ideas.

18. The United States Department of Agriculture offers a wealth of information on all farming problems. The State Department of Agriculture sends out bulletins, sponsors radio addresses, newspaper articles, assists in arranging fairs, and in other ways provides help for the farmer. The Department of Agriculture was first inaugurated by President Lincoln.

19. The 4-H Clubs - with classes and contests, spread the scientific ideas among the younger people and give training in group co-operation. One of the most well known Farmers' Organizations is the Grange.

20. The Farm Cooperative has as its purpose the co-operative buying and selling in order to distribute profits and lower costs.

21. About 1 per cent of the people in Rhode Island are engaged in farming but 40.8 per cent of the land area of the State is devoted to agriculture.

22. Leading agricultural products of Rhode Island are: dairy products, potatoes, poultry products, apples, and small vegetables. Rhode Island's State College is at Kingston, Rhode Island, in the southern part of the State.

*1930 - The number of agricultural workers was 10,471,998. The number engaged in forestry and fishing occupations was 250,469. The total number engaged in manufacturing and mechanical industries was 14,110,652. These figures are taken from the United States Census, and includesworkers from the entire country.

23. In any occupation, in order to understand the problems which the worker faces, the following questions must be considered:

Service to Others

Why do we need this worker?

Required Tasks

What are the various tasks which the worker must perform? This is in reality a job analysis.

Advantages and Disadvantages

What are the good points about this occupation? What are the undesirable features?

Training

How shall a person prepare to enter this line of work?

Financial Returns

Upon what factors does the income depend?

22. Leading agricultural products of Rhode Island are: dairy products, potatoes, poultry products, apples, and small vegetables. Rhode Island's State College is at Kingston, Rhode Island, in the southern part of the State.

*1930 - The number of agricultural workers was 10,471,998. The number engaged in forestry and fishing occupations was 320,449. The total number engaged in manufacturing and mechanical industries was 14,110,852. These figures are taken from the United States Census, and includeswork from the entire country.

23. In any occupation, in order to understand the problems which the worker faces, the following questions must be considered:

Service to Others

Why do we need this worker?

Required Tasks

What are the various tasks which the worker must perform? This is in reality a job analysis.

Advantages and Disadvantages

What are the good points about this occupation? What are the undesirable features?

Training

How shall a person prepare to enter this line of work?

Financial Returns

Upon what factors does the income depend?

Abilities Needed

What personal qualities or abilities are needed to make this worker successful,

*24. In every branch of agriculture there will be found workers on the three or more levels; (a) professional level, (b) skilled level, (c) laborers, or the unskilled level.

25. Farm work as we usually know it, has become closely bound up with other activities, once a part of the home job, and now holding a separate occupational place. Example: (a) butter making, (b) cheese making, (c) ice cream manufacture.

26. In every case since this is a study of the worker, we are more interested in the man or woman doing the work than in the process of production.

Among the agricultural workers we shall have opportunity to study together, we shall consider the market gardener and the dairyman. (These were selected owing to local interest.)

Incidental Learning Products

1. An appreciation of the farmer's place in society, and a consciousness of the agricultural work in any community.

2. An appreciation of the fact that life on the farm has changed, making possible the best of comforts, opportunities, and worthwhile contacts, and an understanding of the importance of scientific knowledge in modern agriculture.

3. An appreciation of the fact that any kind of farm work, well done, means a contribution to better living together.

Abilities Needed

What personal qualities or abilities are needed to make this worker successful.

*24. In every branch of agriculture there will be found workers on the three or more levels: (a) professional level, (b) skilled level, (c) laborers, or the unskilled level.

25. Farm work as we usually know it, has become closely bound up with other activities, once a part of the home job, and now holding a separate occupational place. Example: (a) butter making, (b) cheese making, (c) ice cream manufacture.

26. In every case since this is a study of the worker, we are more interested in the man or woman doing the work than in the process of production.

Among the agricultural workers we shall have opportunity to study together, we shall consider the market gardener and the dairyman. (These were selected owing to local interest.)

Incidental Learning Products

1. An appreciation of the farmer's place in society, and a consciousness of the agricultural work in any community.

2. An appreciation of the fact that life on the farm has changed, making possible the best of comforts, opportunities, and worthwhile contacts, and an understanding of the importance of scientific knowledge in modern agriculture.

3. An appreciation of the fact that any kind of farm work, well done, means a contribution to better living together.

Unit Assignment

(Approximate time allotment -- ten periods)

Introductory period

1. Class discussion of the following case:

Tom and James are two friends. Both live in the same district and are about to enter high school. There has been much discussion about the courses to be pursued. Tom has already said that he felt an agricultural course would be just what he wanted. James, on the other hand, answers, "Stay on the farm? I guess not! I want to do something that will count in the world. I'm going to be a business man."

1. What do you think of the last statement? Do you agree with James? If so, why?

2. What do you think of Tom's decision? Why?

3. In what respects does the farmer "count in the world"?

4. Why have many people held the same ideas about the farmer as James shows here?

5. Why has the respect of people toward farmers increased in the past few years?

The aim of this class presentation is to call forth class discussion, emphasizing

1. The importance of the farmer - he, too,"counts in the world,"

Unit Assignment

(Approximate time allotment -- ten periods)

Introductory period

I. Class discussion of the following case:

Tom and James are two friends. Both live in the same district and are about to enter high school. There has been much discussion about the courses to be pursued. Tom has already said that he felt an agricultural course would be just what he wanted. James, on the other hand, answers, "Stay on the farm? I guess not! I want to do something that will count in the world. I'm going to be a business man."

1. What do you think of the last statement? Do you agree with James? If so, why?

2. What do you think of Tom's decision? Why?

3. In what respects does the farmer "count in the world"?

4. Why have many people held the same ideas about the farmer as James shows here?

5. Why has the respect of people toward farmers increased in the past few years?

The aim of this class presentation is to call forth class discussion, emphasizing

I. The importance of the farmer - he, too, "counts in the world."

2. The fact that an agricultural college course is the most scientific preparation, thus placing farming on a professional basis.

3. The idea that the farmers know little about the world, live poorly, and are isolated, is not necessarily true. Conditions of living have improved for the farmer, and people may respect him as a business man.

2. Letter to pupils

To the Boys and Girls of Grade 7A:

During the next few weeks we are going to think together about the workers in that most important field of work - agriculture. It will be an interesting study and the more knowledge we gain, the greater will be our enjoyment.

It will no doubt surprise you that information about agriculture is to be found everywhere. Perhaps you think of farming as belonging only in the country. This is not true. Up and down your street and community you will find agricultural activities going on. If you are alert, you will continually discover facts about the raising of trees, plants, birds, and animals from many of your friends and neighbors. The newspapers, your magazines, and story books, the moving pictures and radio programs will have much to offer for your study. Be sure to talk to your librarian about it, also.

As you get this information, make a record of it. A notebook is the most simple and convenient form in which to

2. The fact that an agricultural college course is the most scientific preparation, thus placing farming on a professional basis.

3. The idea that the farmers know little about the world, live poorly, and are isolated, is not necessarily true. Conditions of living have improved for the farmer, and people may respect him as a business man.

2. Letter to pupils

To the Boys and Girls of Grade 7A:

During the next few weeks we are going to think together about the wonders in that most important field of work - agriculture. It will be an interesting study and the more knowledge we gain, the greater will be our enjoyment.

It will no doubt surprise you that information about agriculture is to be found everywhere. Perhaps you think of farming as belonging only in the country. This is not true. Up and down your street and community you will find agricultural activities going on. If you are alert, you will continually discover facts about the raising of trees, plants, birds, and animals from many of your friends and neighbors. The newspapers, your magazines, and story books, the moving pictures and radio programs will have much to offer for your study. Be sure to talk to your librarian about it, also.

As you get this information, make a record of it. A notebook is the most simple and convenient form in which to

record facts. It will prove to be one of the most interesting notebooks you have ever made. The required study sheet is designed to help you. Don't fail to choose some interesting activity from the optional file as well. If you have an original suggestion, your teacher will be glad to help you.

Much of the information will not be found in any one book. For this reason you will wish to share your knowledge with the class . Try to find some way to present or display the facts to the group. Maps, bulletin boards, exhibit tables, original drawings and stories will teach more than any study books.

Your best work will be the result of co-operation and sharing.

Class discussion

"During the next few weeks our work will include both class discussion and individual study. To help you in your study, you will receive a Study Guide Sheet for each unit."

"You will find some of the answers in the various books, pamphlets and articles that your teacher has for you. Get acquainted with these books. When you find some information which helps you, be sure to jot down the name of the book, the author, and the pages on which you found the facts."

"We have in most cases, only one or very few copies of a book. This means we must learn to share. For certain

record facts. It will prove to be one of the most interesting notebooks you have ever made. The required study sheet is designed to help you. Don't fail to choose some interesting activity from the optional file as well. If you have an original suggestion, your teacher will be glad to help you.

Much of the information will not be found in any one book. For this reason you will wish to share your knowledge with the class . Try to find some way to present or display the facts to the group. Maps, bulletin boards, exhibit tables, original drawings and stories will teach more than any study books.

Your best work will be the result of co-operation and sharing.

Class discussion

"During the next few weeks our work will include both class discussion and individual study. To help you in your study, you will receive a Study Guide Sheet for each unit."

"You will find some of the answers in the various books, pamphlets and articles that your teacher has for you. Get acquainted with these books. When you find some information which helps you, be sure to jot down the name of the book, the author, and the pages on which you found the facts."

"We have in most cases, only one or very few copies of a book. This means we must learn to share. For certain

books, however, there are enough for each to have copy at one time. Let us look at one of these books."

(1) Locate the title page; the date of the book; the name of the publisher. (2) Find the author's full name. (3) Locate the table of contents; list of illustrations; the index. (4) Locate the chapter on agriculture; a paragraph on dairy farming.

A picture in the textbook is worthy of study. It will help to clarify the paragraph and very often will add greatly to your information.

On many of the pages you will find words, the meaning of which you do not know. Use the dictionary. If you cannot get the meaning, after using the dictionary, ask your teacher to help you.

Let us discuss the first question together:

1. Suppose that you should read the following lines in the newspaper this evening: "Cotton raisers give little hope for crop - boll weevil causes havoc worth millions." "Wheat rust ruins grain prospects."

How would it affect your way of living?

(SG-1) Where is cotton raised? About how far from Rhode Island?

What is a boll weevil? Why were the cotton raisers discouraged?

How may the loss of cotton affect you?

This will result in recognition of the following:

(a) A poor cotton crop means higher prices.

(b) The mill owners who make cloth must therefore charge higher prices.

(c) The people cannot buy as much cotton cloth with their money.

(d) The mills must slow down their work - your father might get less pay.

(e) The stores cannot sell as much cotton cloth - hence a member of your family who is working in a store may be on short time.

(f) You cannot have as many clothes, or in some other way you will have to lack.

Similarly: What is wheat rust? Why do wheat farmers fear this pest? How would the loss of wheat affect your way of living?

(a) Prices of flour would rise.

(b) The price of bread would increase. We could not buy as much bread - or in order to do so we would have to sacrifice some other item of expense.

(c) The ways of living and working of all people are interdependent and, no matter how far away we may be, any serious change in production of goods will affect each one of us.

(SG-2) Why do we say that agriculture is"basic to our civi

This will result in recognition of the following:

(a) A poor cotton crop means higher prices.

(b) The mill owners who make cloth must therefore charge higher prices.

(c) The people cannot buy as much cotton cloth with their money.

(d) The mills must slow down their work - your father might get less pay.

(e) The stores cannot sell as much cotton cloth - hence a member of your family who is working in a store may be on short time.

(f) You cannot have as many clothes, or in some other way you will have to lack.

Similarly: What is wheat rust? Why do wheat farmers fear this pest? How would the loss of wheat affect your way of living?

(a) Prices of flour would rise.

(b) The price of bread would increase. We could not buy as much bread - or in order to do so we would have to sacrifice some other item of expense.

(c) The ways of living and working of all people are interdependent and, no matter how far away we may be, any serious change in production of goods will affect each one of us.

(40-2) Why do we say that agriculture is basic to our city?

civilization"? In what respect is it one of the most ancient occupations? (1) pp. 57-59; (2) p.127; (3) p.167; (7) p.50; (9) pp. 1-2; (12) p.235; (17) p. 57; (19) p. 89.

An exercise in locating information:

(a) How shall we find the place in the book that will give us the desired information? (Use of index)

(b) Locate a paragraph that will help to answer the question. Read it carefully.

(c) Blackboard Exercise - Let us list reasons why agriculture is basic. The following facts should be presented:

(a) Agriculture supplies raw materials for clothing, food and shelter. Give examples.

(b) Agriculture supplies raw materials which makes it possible to carry on any kind of activity. Example: The making and distribution of a newspaper.

(c) Agriculture supplies raw materials for comforts and luxuries.

Consult your list of references for books to study. The number in parentheses after each question refers to the number of the reference book on the list. You may find other books that will help. If so, add the name to the list.

(The teacher will find a wealth of pictorial material for this unit. The various State Departments of Agriculture, the United States Department of Agriculture, and advertising materials for farm magazines will supply interesting charts,

civilization"? In what respect is it one of the most ancient occupations? (1) pp. 27-29; (2) p.127; (3) p.127; (7) p.60; (9) pp. 1-2; (12) p.222; (17) p. 27; (19) p. 29.

An exercise in locating information:

(a) How shall we find the place in the book that will give us the desired information? (Use of index)

(b) Locate a paragraph that will help to answer the question. Read it carefully.

(c) Blackboard Exercise - Let us list reasons why agriculture is basic. The following facts should be presented:

(a) Agriculture supplies raw materials for clothing, food and shelter. Give examples.

(b) Agriculture supplies raw materials which makes it possible to carry on any kind of activity. Example: The making and distribution of a newspaper.

(c) Agriculture supplies raw materials for comforts and luxuries.

Consult your list of references for books to study. The number in parentheses after each question refers to the number of the reference book on the list. You may find other books that will help. If so, add the name to the list.

(The teacher will find a wealth of pictorial material for this unit. The various State Departments of Agriculture, the United States Department of Agriculture, and advertising materials for farm magazines will supply interesting charts,

bulletins and pictures.)

Individual Work Period

(*SG-3) What are some inventions that have aided the farmer in his work? (1) pp.58-59; (2) p.127; (12) P.239; (20) pp.63-65; (21) pp.233-236; 426-430.

(SG-4) How have the farmers' living conditions been improved? his opportunities for social life? (16) 246-259; pp.263-271; 310-321; (1) pp. 67-69; (2) pp.128-130; (4)pp.48-50; (9) P.7; (11) p.105; (12) pp.237-238; 241-254; 310-321; (17) 64-65; 72-73; (20) pp.65-66

(SG-5) Into what divisions has farming been specialized? (1) p.83; (2) pp. 138-147; (9) p.10; (11) pp.106-107; (12) pp.236-237; 244, 522; (17) p. 60.

(SG-6) What is a genreal farmer? (2) p. 128; (3) p.168; (11) p. 102; (12) p. 240.

(*SG-7) How do the number of people engaged in farming in the United States compare with the number engaged in manufacturing? See Census report.

(*SG-8) There are many more "general farmers" than special farmers. Why do you think this is so? (1) pp.78-83; (2) p. 128; (3) pp. 167-168; (4) pp. 50-52; (5) p.47; (9) p. 3; (11) p. 102; (12) p.240; (16) pp.172-174.

(SG-9) How were our State Colleges established? Where is Rhode Island's Land Grant College? (21) pp. 430-433.

(SG10) What are some ways in which the government helps

bulletins and pictures.)

Individual Work Period

(*30-3) What are some inventions that have aided the farmer in his work? (1) pp.88-89; (2) p.127; (12) p.288; (20) pp.63-65; (21) pp.233-236; 428-430.

(30-4) How have the farmers' living conditions been improved? his opportunities for social life? (16) 246-259; pp.268-271; 310-321; (1) pp. 67-69; (2) pp.128-130; (4)pp.48-50; (9) p.7; (11) p.105; (12) pp.237-238; 241-254; 310-321; (17) 64-65; 72-73; (20) pp.65-66

(30-5) Into what divisions has farming been specialized? (1) p.83; (2) pp. 138-147; (9) p.10; (11) pp.106-107; (12) pp.236-237; 244, 322; (17) p. 60.

(30-6) What is a general farmer? (2) p. 128; (3) p.168; (11) p. 102; (12) p. 240.

(*30-7) How do the number of people engaged in farming in the United States compare with the number engaged in manufacturing? See Census report.

(*30-8) There are many more "general farmers" than special farmers. Why do you think this is so? (1) pp.78-83; (2) p. 128; (3) pp. 167-168; (4) pp. 50-52; (5) p.47; (9) p. 3; (11) p. 102; (12) p.240; (16) pp.172-174.

(30-9) How were our State Colleges established? Where is Rhode Island's land Grant College? (21) pp. 430-433.

(30-10) What are some ways in which the government helps

the farmer? (1) pp.70-71; (9) pp.18, 53-56; (12) pp.242-243, 252; (16) pp.178-182; (17) pp.67-68; (20) pp.70, 74-76; (21) pp.430-433.

(SG-11) What is the meaning of the term "4-H Clubs"? (1) pp.72-73; (12) p.236.

(SG-12) Why do you think it important for city boys and girls to know about farm problems? (9) p.5; (12) pp.241, 253-254.

(*SG-13) Why are rural schools apt to have lower standards than city schools?

(SG-14) What is a consolidated school?

(SG-15) What is meant by a "Farmers' Co-operative"? (16) pp. 213-239.

(SG-16) What are some of Rhode Island's leading agricultural products?

References

1. Zeigler, Samuel and Jaquette, Helen W., Choosing an Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

2. Gowin, Enoch Burton, Wheatley, William Alonzo, and Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1923.

3. Hill, Howard C., Vocational Civics, Ginn and Co., Boston, Mass., 1938.

4. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

5. Davis, Frank G. and Davis, B. Carnall, Guidance for Youth, Ginn and Co., Boston, Mass., 1928.

the farmer? (1) pp.70-71; (9) pp.18, 55-56; (12) pp.242-243, 252; (15) pp.178-182; (17) pp.87-88; (20) pp.70, 74-76; (21) pp.430-433.

(35-11) What is the meaning of the term "4-H Clubs"? (1) pp.78-79; (12) p.236.

(35-12) Why do you think it important for city boys and girls to know about farm problems? (9) p.6; (12) pp.241, 256-264.

(35-13) Why are rural schools apt to have lower standards than city schools?

(35-14) What is a consolidated school?

(35-15) What is meant by a "Farmers' Co-operative"? (16) pp. 218-232.

(35-16) What are some of Rhode Island's leading agricultural products?

References

1. Zeigler, Samuel and Jaquette, Helen W., Choosing an Occupation. John C. Winston Co., Philadelphia, Pa., 1924.

2. Cowin, Lincoln Burton, Wheatley, William Alcazo, and Brewer, John M., Occupations. Ginn and Co., Boston, Mass., 1928.

3. Hill, Howard C., Vocational Civics. Ginn and Co., Boston, Mass., 1928.

4. Proctor, William Martin, Vocations. Houghton Mifflin Co., New York, N. Y., 1929.

5. Davis, Frank G. and Davis, S. Carnall, Guidance for Youth. Ginn and Co., Boston, Mass., 1928.

6. Lynn, Bernard J., Getting a Living, Franklin Supply Co., Boston, Mass., 1921.

7. Edmonson, James B. and Dondineau, Arthur, Vocations Through Problems, MacMillan Co., New York, N. Y., 1937.

8. Platt, Rutherford, Book of Opportunities, G. Putnam and Sons, New York, N. Y., 1926

9. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

10. Filene, Catherine, Careers for Women, Houghton Mifflin Co., New York, N. Y., 1934.

11. Holbrook, Harold Lyman, and Macgregor, A. Laura, Our World of Work, Allyn & Bacon, Boston, Mass., 1929

12. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

13. Cottler, Joseph, and Brecht, Harold, Careers Ahead, Little, Brown and Co., Boston, Mass., 1937.

14. Success pamphlets. Monograph, Vocational Information Series, Directed by Chloris Shade, Morgan-Dillon, Publishers, Chicago, Ill., 1937.

15. Weaver, E. W. and Byler, J. Frank, Profitable Vocations, for Boys, Laidlaw Brothers, New York, N. Y., 1916.

16. Power, R. A. and Kivlin, Vincent Earl, Handbook of Farming for Boys and Girls, E. M. Hale Co., Milwaukee, Wis., 1937.

17. Chapman, Paul W., Occupational Guidance, E. Smith and Co., Atlanta, Ga., 1937.

18. Giles, Frederick Mayer and Giles, Imogene Kean, Vocational Civics, MacMillan Co., New York, N. Y., 1918.

19. Rosengarten, A. M., Choosing Your Life Work, McGraw, Hill Co., New York, N. Y., 1928.

20. Giles, Imogene K., Vocational Civics, MacMillan Co., New York, N. Y., 1936.

21. Faulkner, Harold Underwood, American Economic History, Harper Brothers, New York, N. Y., 1926.

6. Lynn, Bernard J., Getting a Living, Franklin Supply Co., Boston, Mass., 1921.

7. Edmonson, James B. and Dondineau, Arthur, Vocations Through Problems, Macmillan Co., New York, N. Y., 1927.

8. Platt, Sulbertford, Book of Opportunities, G. Putnam and Sons, New York, N. Y., 1928

9. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

10. Villers, Catherine, Careers for Women, Houghton Mifflin Co., New York, N. Y., 1924.

11. Holbrook, Harold Lyman, and Hagregor, A. Laura, Our World of Work, Ginn & Sacon, Boston, Mass., 1929

12. Drever, John M., Occupations, Ginn and Co., Boston, Mass., 1926.

13. Cottler, Joseph, and Brecht, Harold, Careers Ahead, Little, Brown and Co., Boston, Mass., 1927.

14. Success pamphlets. Monograph, Vocational Information Series, Directed by Charlie Shade, Morgan-Dillon, Publishers, Chicago, Ill., 1927.

15. Weaver, E. W. and Zylar, J. Frank, Profitable Vocations for Boys, Laidlaw Brothers, New York, N. Y., 1916.

16. Power, R. A. and Kivlin, Vincent Earl, Handbook of Training for Boys and Girls, R. E. Dale Co., Milwaukee, Wis., 1927.

17. Chapman, Paul W., Occupational Guidance, E. Smith and Co., Atlanta, Ga., 1927.

18. Dillon, Frederick Dwyer and Giles, Imogene Dean, Vocational Civics, Macmillan Co., New York, N. Y., 1918.

19. Rosenstein, A. M., Choosing Your Life Work, McGraw, Hill Co., New York, N. Y., 1928.

20. Giles, Imogene K., Vocational Civics, Macmillan Co., New York, N. Y., 1926.

21. Sumner, Harold Underwood, American Economic History, Harper Brothers, New York, N. Y., 1928.

When you have completed your study, write a brief summary of the important points that will help to answer, the questions, and hand it to your teacher for her approval.

(Much individual help will be necessary in the study period. The teacher should arrange for informal discussions in small groups concerning problems that have special difficulties.)

(SG-18) When you have completed the required work, go to the card file and choose one or more of the optional activities in which you are interested.

Optional Activities

1. Have you ever spent a day or more on a farm? If so, be prepared to tell your class about your experience.

2. Draw a picture showing some phase of life on a farm.

3. Make a collection of pictures showing the inventions which have helped the farmer. Arrange these in order of their invention. If your collection is not complete, make a chart.

4. Early farm implements were very simple. Make a series of drawings showing life on a farm during the Middle Ages.

5. Look up the story of Cyrus Mc Cormick and his reaper.

6. The modern farmer uses electricity as far as possible. To what extent are the farms of America using electric power?

7. The various Bureaus of the United States Department of Agriculture serve the farmer in many ways. Make a chart

When you have completed your study, write a brief summary of the important points that will help to answer the questions, and hand it to your teacher for her approval.

(Much individual help will be necessary in the study period. The teacher should arrange for informal discussions in small groups concerning problems that have special difficulties.)

(20-15) When you have completed the required work, go to the card file and choose one or more of the optional activities in which you are interested.

Optional Activities

1. Have you ever spent a day or more on a farm? If so, be prepared to tell your class about your experience.

2. Draw a picture showing some phase of life on a farm.

3. Make a collection of pictures showing the inventions which have helped the farmer. Arrange these in order of their invention. If your collection is not complete, make a chart.

4. Early farm implements were very simple. Make a series of drawings showing life on a farm during the Middle Ages.

5. Look up the story of Cyrus McCormick and his reaper.

6. The modern farmer uses electricity as far as possible. To what extent are the farms of America using electric power?

7. The various bureaus of the United States Department of Agriculture serve the farmer in many ways. Make a chart

showing the services which the Bureaus render.

8. The State government serves the farmer. Make a list of the ways in which our State helps Rhode Island farmers.

9. Make a graph showing the percentage of land in Rhode Island used for farms.

10. Draw a picture map showing farm products in Rhode Island.

11. Have you a camera? If so, take pictures of agricultural work. You may arrange to show these through the projector.

12. Draw a cartoon depicting the meaning of the phrase "farmer and business man at one time."

13. Have you ever attended an agricultural fair? Write a report of your experiences and impressions.

14. The city newspaper very often has a column entitled "Farm News." Do you think this is necessary? Why?

15. Cut from your newspaper a series of articles under "Farm News." Note the topics discussed. Write a brief statement of the important points.

16. Look in your newspaper for reports of 4-H Club meetings. What are some of the activities of these clubs?

17. Bring to class as many farm magazines as you can. Notice circulation of each. What topics are treated in the magazines?

18. Write to the United States Department of Agriculture

showing the services which the Bureau renders.

8. The State government serves the farmer. Make a list of the ways in which our State helps Rhode Island farmers.

9. Make a graph showing the percentage of land in Rhode Island used for farms.

10. Draw a picture map showing farm products in Rhode Island.

11. Have you a camera? If so, take pictures of agricultural work. You may arrange to show these through the projector.

12. Draw a cartoon depicting the meaning of the phrase "farmer and business man at one time."

13. Have you ever attended an agricultural fair? Write a report of your experiences and impressions.

14. The city newspaper very often has a column entitled "Farm News." Do you think this is necessary? Why?

15. Cut from your newspaper a series of articles under "Farm News." Note the topics discussed. Write a brief statement of the important points.

16. Look in your newspaper for reports of 4-H Club meetings. What are some of the activities of these clubs?

17. Bring to class as many farm magazines as you can. Notice circulation of each. What topics are treated in the magazines?

18. Write to the United States Department of Agriculture

for free bulletins on agriculture.

19. Write to the State College for a list of the agricultural courses offered there. Perhaps you can procure a catalogue. What particular branches of agriculture do the courses represent?

20. The United States has fairly well-defined farm regions. Draw a map indicating the corn belt, the cotton region and other divisions.

21. Look through a popular magazine. Do you find any agricultural information? Prepare a talk to the class giving the most important facts included about agriculture. Why do you think such information was included in a popular magazine?

22. Make a graph showing the daily wage of a farm hand as compared with the other workers that you know.

23. Make a graph showing (a) the number of farmers in the United States; (b) the number of workers in other fields; such as transportation, mining, automobile manufacturing and textile manufacturing.

24. Write a play in which the importance of the farmer in our daily living is depicted.

25. Many of the folk songs which we enjoy have their origins in the work and life on the farm. Plan a program making use of these songs.

26. Some of our best loved poems suggest agricultural

for free bulletins on agriculture.

19. Write to the State College for a list of the agricultural courses offered there. Perhaps you can procure a catalogue. What particular branches of agriculture do the courses represent?

20. The United States has fairly well-defined farm regions. Draw a map indicating the corn belt, the cotton region and other divisions.

21. Look through a popular magazine. Do you find any agricultural information? Prepare a talk to the class giving the most important facts included about agriculture. Why do you think such information was included in a popular magazine?

22. Make a graph showing the daily wage of a farm hand as compared with the other workers that you know.

23. Make a graph showing (a) the number of farmers in the United States; (b) the number of workers in other fields; such as transportation, mining, automobile manufacturing and textile manufacturing.

24. Write a play in which the importance of the farmer in our daily living is depicted.

25. Many of the folk songs which we enjoy have their origins in the work and life on the farm. Plan a program making use of these songs.

26. Some of our best loved poems suggest agricultural

scenes. Make a collection of such poems. Your class will enjoy them very much.

27. Write an imaginary diary of a general farmer, covering a week's activities. You will discover what a busy man he is.

28. Most farmers belong to the local grange. Watch the newspapers to find what activities are carried on.

29. Organize a Farm Current Events Committee. Your committee should keep the class informed of the news events which concern the farmer.

30. Make a chart showing some ways in which you are dependent upon agricultural workers.

31. Find out about Luther Burbank. Write a report on his life and work.

32. Volunteer to be a member of a bulletin board or exhibit committee. Make your work attractive and informational. Your class will learn much from pictures that they cannot learn in any other way.

33. Have you ever used a projector? Make a collection of pictures that could be shown through the projector. Why not form a committee that would plan the talks and select the pictures for a lantern lesson?

34. Make a chart showing how the time needed for harvesting an acre of wheat has decreased in the past century.

35. Plan a debate on the subject: Resolved that living

scenes. Make a collection of some poems. Your class will enjoy them very much.

27. Write an imaginary diary of a general farmer, covering a week's activities. You will discover what a busy man he is.

28. Most farmers belong to the local grange. Watch the newspapers to find what activities are carried on.

29. Organize a Farm Current Events Committee. Your committee should keep the class informed of the news events which concern the farmer.

30. Make a chart showing some ways in which you are dependent upon agricultural workers.

31. Find out about Luther Burbank. Write a report on his life and work.

32. Volunteer to be a member of a bulletin board or exhibit committee. Make your work attractive and informational. Your class will learn much from pictures that they cannot learn in any other way.

33. Have you ever used a projector? Make a collection of pictures that could be shown through the projector. Why not form a committee that would plan the talks and select the pictures for a lantern lesson?

34. Make a chart showing how the time needed for harvesting an acre of wheat has decreased in the past century.

35. Plan a debate on the subject: Resolved that living

in the country is more desirable than living in the city.

36. Draw a cartoon which suggests a common farm problem.

37. Plan a debate: Resolved that general farming is more desirable than specialized farming. There are arguments for both sides.

38. Look for a cartoon in a newspaper or magazine depicting a farm problem. Be prepared to explain it to your class.

39. Write a sketch which will show the reason for organizing farm co-operatives.

40. Stage an interview between a farmer who believes in agricultural colleges and one who does not.

41. Make a comparison between a country school and Perry Junior High School. Pretend that you have exchanged letters with a farm boy or girl.

42. Plan a series of Radio Talks on such topics as: (1) Rhode Island agriculture; (2) The United States Department of Agriculture; (3) The Agricultural College. You may think of others.

43. Does your school have a weekly newspaper? Why not submit a short article about agriculture?

44. Many of the most interesting library books depict scenes from farm life. Choose one of these and write a short story about the farm scenes. Perhaps you will enjoy the scenes from other countries.

in the country is more desirable than living in the city.

36. Draw a cartoon which suggests a common farm problem.

37. Plan a debate: Resolved that general farming is more desirable than specialized farming. There are arguments for both sides.

38. Look for a cartoon in a newspaper or magazine depicting a farm problem. Be prepared to explain it to your class.

39. Write a sketch which will show the reason for organizing farm co-operatives.

40. Stage an interview between a farmer who believes in agricultural colleges and one who does not.

41. Make a comparison between a country school and Perry Junior High School. Pretend that you have exchanged letters with a farm boy or girl.

42. Plan a series of Radio Talks on such topics as: (1) Rhode Island agriculture; (2) The United States Department of Agriculture; (3) The Agricultural College. You may think of others.

43. Does your school have a weekly newspaper? Why not submit a short article about agriculture?

44. Many of the most interesting library books depict scenes from farm life. Choose one of these and write a short story about the farm scenes. Perhaps you will enjoy the scenes from other countries.

45. Look up farming methods used in India and China. Compare these with the methods used in the United States. Perhaps you could make a picture story.

46. What is a share cropper? Be prepared to tell about him.

47. Write a sketch which will show the work of the Home Demonstration Agent.

48. Look through the advertisements of magazines and newspapers. Cut out any that refer to agriculture. Paste these in a book or on cards for display.

49. What inventions do you think have helped the farmer's wife? Collect pictures to illustrate your answer.

50. Many of the weekly assembly motion pictures will have incidental information about agriculture. Keep a notebook of such information and discuss it with your class.

Class Presentation Period

1. The pupils give floor talks if they have been assigned. Suggested topics for floor talks include:

(a) The Importance of Agriculture

(b) Inventions That Have Changed Farm Life

(c) The Establishment of Our State Colleges

(d) Government Aid for the Farmer

(e) Rhode Island Agriculture

2. Presentation of special reports, original drawings and exhibits will depend upon the optional activities that

45. Look up farming methods used in India and China. Compare these with the methods used in the United States. Perhaps you could make a picture story.

46. What is a share cropper? Be prepared to tell about him.

47. Write a sketch which will show the work of the Home Demonstration Agent.

48. Look through the advertisements of magazines and newspapers. Cut out any that refer to agriculture. Paste these in a book or on cards for display.

49. What inventions do you think have helped the farmer's wife? Collect pictures to illustrate your answer.

50. Many of the weekly assembly motion pictures will have incidental information about agriculture. Keep a note-book of such information and discuss it with your class.

Class Presentation Period

1. The pupils give floor talks if they have been assigned. Suggested topics for floor talks include:

(a) The Importance of Agriculture

(b) Inventions That Have Changed Farm Life

(c) The Establishment of our State College

(d) Government Aid for the Farmer

(e) Rhode Island Agriculture

2. Presentation of special reports, original drawings and exhibits will depend upon the optional activities that

have been chosen.

3. Arrange for a lesson with the opaque projector using the pictures as a review exercise.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The State College for Rhode Island is 1.....

a) Brown University.
b) Providence College.
c) Kingston College.
d) Smith College.

Agricultural Colleges were established 2.....

a) by the government.
b) by private organizations.
c) by public subscription.
d) by individuals.

When people of early days undertook planting 3.....

a) they continued their nomadic habits.
b) they turned to cattle raising.
c) they settled down and learned to improve their crops from year to year.
d) they turned to hunting and fishing.

The changing living conditions on a farm should 4.....

a) cause young people to move from farms to the city.
b) cause young people to consider farming as a possible career.
c) cause young people to look down on farmers.
d) increase the number of abandoned farms.

The farmer need not be isolated for 5.....

a) agricultural machines
b) the size of his farm
c) the automobile
d) the horse

has made contact with other groups possible.

have been chosen.

3. Arrange for a lesson with the opaque projector using the pictures as a review exercise.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The State College for Rhode Island is 1.....

a) Brown University.
b) Providence College.
c) Kingston College.
d) Smith College.

Agricultural Colleges were established 2.....

a) by the government.
b) by private organizations.
c) by public subscription.
d) by individuals.

When people of early days undertook planting 3.....

a) they continued their nomadic habits.
b) they turned to cattle raising.
c) they settled down and learned to improve their crops from year to year.
d) they turned to hunting and fishing.

The changing living conditions on a farm should 4.....

a) cause young people to move from farms to the city.
b) cause young people to consider farming as a possible career.
c) cause young people to look down on farmers.
d) increase the number of abandoned farms.

The farmer need not be isolated for 5.....

a)agricultural machines
b)the size of his farm
c)the automobile
d)the horse

has made contact with other groups possible.

The total hours of labor per acre for planting or harvesting has 6.....

a) increased.
b) decreased a little.
c) decreased greatly.
d) remained the same.

Single crop farming is considered 7.....

a) to have many disadvantages.
b) the best method of farming.
c) the method with the least risk.
d) the most popular method.

The greatest disadvantage in all agricultural work is 8.....

a) the very small income.
b) the great risk of loss through storms, disease or insect pests.
c) that the work includes unpleasant tasks.
d) the isolation of farm workers.

To be successful, a farmer should study 9.....

a) the way his father and grandfather did things.
b) the way his neighbors are doing things.
c) the way that scientific experiments suggest.
d) the way that seems right.

The purpose of a Farmers' Co-operative is 10.....

a) to sell products at reduced prices
b) to sell products as a group and divide profits from the sale among the farmers.
c) to suggest new methods only.
d) to make friends.

The farmer who enjoys meeting people and exchanging ideas is particularly interested in 11.....

a) the government regulations for farmers.
b) the agricultural fair.
c) reports of the State College.
d) the farm magazines.

The total hours of labor per acre for planting or harvesting has 6.....

a) increased.
b) decreased a little.
c) decreased greatly.
d) remained the same.

Single crop farming is considered 7.....

a) to have many disadvantages.
b) the best method of farming.
c) the method with the least risk.
d) the most popular method.

The greatest disadvantage in all agricultural work is 8.....

a) the very small income.
b) the great risk of loss through storms, diseases or insect pests.
c) that the work includes unpleasant tasks.
d) the isolation of farm workers.

To be successful, a farmer should study 9.....

a) the way his father and grandfather did things.
b) the way his neighbors are doing things.
c) the way that scientific experiments suggest.
d) the way that seems right.

The purpose of a Farmers' Co-operative is 10.....

a) to sell products at reduced prices
b) to sell products as a group and divide profits from the sale among the farmers.
c) to suggest new methods only.
d) to make friends.

The farmer who enjoys meeting people and exchanging ideas is particularly interested in 11.....

a) the government regulations for farmers.
b) the agricultural fair.
c) reports of the State College.
d) the farm magazines.

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The agricultural worker produces (1) materials. From the products of agriculture, we get food, (2), much of our shelter, and many of the comforts we enjoy. Therefore, we may say that agriculture is (3) to our modern ways of living. 1..... 2..... 3.....

Many thousands of years ago, man first learned to (4) the soil. Up to about 1800, methods of agriculture had changed (5). Soon after 1800, a number of (6) led to great changes in farming. About this time the cast (7) plow and the grain (8) came into use. In the year 1832 Mc Cormick invented the (9). 4..... 5..... 6..... 7..... 8..... 9.....

Agriculture has improved greatly through the application of (10) knowledge. The wide-awake farmer gets all the (11) he possibly can. He is not afraid to (12). 10..... 11..... 12.....

1. very little
2. basic
3. much
4. iron
5. training
6. experiment
7. combine
8. raw
9. manufactured
10. cradle
11. educate
12. limited
13. scythe
14. reaper
15. clothing
16. inventions
17. cultivate
18. mining
19. scientific

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The agricultural worker produces (1) 1.....
materials. From the products of agriculture,
we get food, (2), much of our shelter, and 2.....
many of the comforts we enjoy. Therefore, we
may say that agriculture is (3) to our modern 3.....
ways of living.

Many thousands of years ago, man first
learned to (4) the soil. Up to about 1800, 4.....
methods of agriculture had changed (5). 5.....
Soon after 1800, a number of (6) led to great 6.....
changes in farming. About this time the cast 7.....
(7) plow and the grain (8) came into use. 8.....
In the year 1832 Mr Cormick invented the (9). 9.....

Agriculture has improved greatly through
the application of (10) knowledge. The wide- 10.....
awake farmer gets all the (11) he possibly can. 11.....
He is not afraid to (12). 12.....

1. very little	7. combine	13. soybine
2. basic	8. raw	14. reaper
3. much	9. manufactured	15. clothing
4. iron	10. cradle	16. inventions
5. training	11. educate	17. cultivate
6. experiment	12. limited	18. mining
		19. scientific

Today the farmer need not be (13). The 13.....
coming of the (14), the use of telephones, and 14.....
the widespread building of fine (15) has greatly 15.....
increased his opportunities for social life.

Much of the heavy (16) has been taken from 16.....
the farm work through labor-saving devices. This
is true in the (17) as well as in the field. 17.....

Farming, like all other fields of work, has
become highly (18). Yet, there are (19) 18.....
general farmers than (20) farmers. 19.....

In many sections, the small country school 20.....
has been replaced by (21) schools. 21.....

The (22) Clubs help to teach young people 22.....
better farm methods and, also, help to develop
a spirit of (23). 23.....

The law which made possible the establishment
of our State colleges was first introduced by 24.....
Senator (24), about the time of the (25) War. 25.....
State agricultural colleges are also known as
(26). Colleges. 26.....

1. Civil
2. short
3. Department
4. Morrill
5. Bureau
6. 4-H
7. Revolutionary
8. consolidated
9. home
10. tractors
11. isolated
12. special
13. less
14. drudgery
15. office machines
16. crowded
17. specialized
18. automobile
19. Land Grant
20. more
21. roads
22. one-room
23. co-operation

Today the farmer need not be (13). The 13.....
coming of the (14), the use of telephones, and 14.....
the widespread building of lines (15) has greatly 15.....
increased his opportunities for social life.

Much of the heavy (16) has been taken from 16.....
the farm work through labor-saving devices. This
is true in the (17) as well as in the field. 17.....

Farming, like all other fields of work, has
become highly (18). Yet, there are (19) 18.....
general farmers than (20) farmers. 19.....

In many sections, the small country school 20.....
has been replaced by (21) schools. 21.....

The (22) Clubs help to teach young people 22.....
better farm methods and, also, help to develop
a spirit of (23). 23.....

The law which made possible the establishment
of our state colleges was first introduced by 24.....
Senator (24), about the time of the (25) War. 25.....
State agricultural colleges are also known as
(26) Colleges. 26.....

1. civil
2. short
3. department
4. horrible
5. Bureau
6. 4-H
7. devoted pioneers
8. consolidated
9. home
10. tractors
11. isolated
12. special
13. face
14. drudgery
15. office machines
16. crowded
17. specialized
18. automobile
19. land grant
20. more
21. rural
22. one-room
23. co-operation

Busy farmers may take (27) unit courses 27.....
in agriculture at the State College during the 28.....
winter. The United States (28) of (29) sends 29.....
out helpful bulletins on agriculture. This
Department was first organized by President
(30). 30.....

The (31) Stations are usually connected 31.....
with State Colleges.

In our study we are interested primarily
in (32) rather than in the product. 32.....

The most desirable education for scientific
farming is a (33) year course in an (34) 33.....
college. 34.....

Most people agree that agricultural workers
have more (35) than workers in a factory. 35.....

Most of the people in Rhode Island are
engaged in (36) and related industries. 36.....

Among the leading agricultural products in 37.....
Rhode Island are (37), (38), and (39). 38.....
39.....

1. manufacturing
2. dairy products
3. low
4. worker
5. oranges
6. Department
7. Washington
8. extensive
9. agriculture
10. eggs and poultry
11. independence
12. engineering
13. potatoes
14. short
15. Lincoln
16. Interior
17. four
18. cotton
19. pay
20. two
21. farming
22. Agriculture
23. experiment
24. Bureau

Busy farmers may take _____ (27) _____ unit courses 27.....

in agriculture at the State College during the 28.....

winter. The United States _____ (28) _____ of _____ (29) _____ sends 29.....

out helpful bulletins on agriculture. This

Department was first organized by President

_____ (30) _____. 30.....

The _____ (31) _____ stations are usually connected 31.....

with State Colleges.

In our study we are interested primarily

in _____ (32) _____ rather than in the product. 32.....

The most desirable education for scientific

farming is a _____ (33) _____ year course in an _____ (34) _____ 33.....

college. 34.....

Most people agree that agricultural workers

have more _____ (35) _____ than workers in a factory. 35.....

Most of the people in Rhode Island are

engaged in _____ (36) _____ and related industries. 36.....

Among the leading agricultural products in 37.....

Rhode Island are _____ (37) _____, _____ (38) _____, and _____ (39) _____. 38.....

39.....

1. manufacturing	9. agriculture	17. corn
2. dairy products	10. eggs and poultry	18. cotton
3. low	11. independence	19. pay
4. worker	12. engineering	20. two
5. oranges	13. potatoes	21. farming
6. Department	14. short	22. Agriculture
7. Washington	15. Lincoln	23. experiment
8. extensive	16. Interior	24. Bureau

CHAPTER III

THE MARKET GARDENER

Unit II

The market gardener specializes in the raising of small fruits and vegetables. During the past decade, this branch of farming has become a major agricultural industry. The successful market gardener must arrange for intensive cultivation of a comparatively small area. He must be able to plan ahead in order to meet seasonal demands. The perishable nature of the products makes necessary utmost economy of time in transportation and marketing. Modern health research, scientific methods of preserving foods, and the increasingly rapid means of transporting products combine to give the market gardener a place of growing importance in our everyday life.

(Approximate time allotment - seven periods)

Delimitation of Unit II

Service to Others

1. The market gardener specializes in the raising of small fruits and vegetables.

*2. Market gardening means intensive growing for marketing purposes.

CHAPTER III

THE MARKET GARDENER

Unit II

The market gardener specializes in the raising of small fruits and vegetables. During the past decade, this branch of farming has become a major agricultural industry. The successful market gardener must arrange for intensive cultivation of a comparatively small area. He must be able to plan ahead in order to meet seasonal demands. The perishable nature of the products makes necessary utmost economy of time in transportation and marketing. Modern health research, scientific methods of preserving foods, and the increasingly rapid means of transporting products combine to give the market gardener a place of growing importance in our everyday life.

(Approximate time allotment - seven periods)

Delimitation of Unit II

<u>Service to Others</u>

1. The market gardener <u>specializes</u> in the raising of small fruits and vegetables.

2. Market gardening means <u>intensive growing</u> for marketing purposes.

*3. Specialization began when certain workers found it convenient to exchange services for goods. Hence these early gardens were called "trade gardens". Later "market gardens" became the common term.

4. To-day, vegetables, at first not considered commercially valuable, yield millions annually.

*5. The decade from 1920 to 1930 saw vegetable raising increase more than any other kind of agricultural production. This increase was chiefly noted in such vegetables as celery, lettuce, spinach, peas and beans.

6. Reports from the United States Department of Agriculture state that the sale of vegetables brought an annual income of three quarters of a billion dollars to farmers in years 1932 to 1935.

7. The market gardener provides fresh foods, attractively packed in convenient quantities, and procurable at nearby stores. This worker assists the housewife in providing healthful foods with pleasing variety.

Required Tasks

1. Vegetable raising may be divided into several specialized types, namely:

(a) Market gardening: - This term refers to the raising of a variety of small vegetables.

(b) Truck farming: - This term refers to the raising of one or few vegetable crops in considerable quantities.

*3. Specialization began when certain workers found it convenient to exchange services for goods. Hence these early gardens were called "trade gardens". Later "market gardens" became the common term.

4. To-day, vegetables, at first not considered commercially valuable, yield millions annually.

*5. The decade from 1920 to 1930 saw vegetable raising increase more than any other kind of agricultural production. This increase was chiefly noted in such vegetables as celery, lettuce, spinach, peas and beans.

6. Reports from the United States Department of Agriculture state that the sale of vegetables brought an annual income of three quarters of a billion dollars to farmers in years 1932 to 1933.

7. The market gardener provides fresh foods, attractively packed in convenient quantities, and procurable at nearby stores. This worker assists the housewife in providing healthful foods with pleasing variety.

Required Tasks

1. Vegetable raising may be divided into several specialized types, namely:

(a) Market gardening: - This term refers to the raising of a variety of small vegetables.

(b) Truck farming: - This term refers to the raising of one or few vegetable crops in considerable quantities.

(*c) "Canning" gardens: - In this type of garden the products are sold to canning factories exclusively.

(*d) Vegetable forcing: - This term refers to the raising of vegetables under glass to meet the demand for early garden produce.

2. The market gardener who wishes to supply a local market with fresh vegetables of high quality must consider such factors as: (a) nearness to city; (b) condition of roads; (c) general climate; (d) type of soil before deciding upon his crops.

3. He must plan ahead so that his crops will be ready for market at the most desirable time. In this way he will benefit from the early high prices.

4. The market gardener must decide upon the number and variety of crops he wishes to plant. He then makes a careful selection of seeds. In some cases he may select seeds from previous crops. Otherwise, he must depend upon a reliable nursery which distributes seeds.

5. The gardener must give thought to the location of the various beds. Plants may be started in the greenhouse, in hot beds or cold frames, and transplanted at the proper time.

6. This worker must arrange for heavy fertilization of his land in order to get a high yield per acre.

7. He must install a system for watering his gardens.

(c) "Canning" gardens: - In this type of garden the products are sold to canning factories exclusively.

(d) Vegetable forcing: - This term refers to the raising of vegetables under glass to meet the demand for early garden produce.

2. The market gardener who wishes to supply a local market with fresh vegetables of high quality must consider such factors as: (a) nearness to city; (b) condition of roads; (c) general climate; (d) type of soil before deciding upon his crops.

3. He must plan ahead so that his crops will be ready for market at the most desirable time. In this way he will benefit from the early high prices.

4. The market gardener must decide upon the number and variety of crops he wishes to plant. He then makes a careful selection of seeds. In some cases he may select seeds from previous crops. Otherwise, he must depend upon a reliable nursery which distributes seeds.

5. The gardener must give thought to the location of the various beds. Plants may be started in the greenhouse, in hot beds or cold frames, and transplanted at the proper time.

6. This worker must arrange for heavy fertilization of his land in order to get a high yield per acre.

7. He must install a system for watering his gardens.

8. The market gardener supervises, or actually does, the plowing, fertilizing, planting, cultivating, transplanting, harvesting and marketing of the crops.

*9. The manager of a large market garden arranges for the packing and labelling of his products in attractive and convenient packages. This will help to identify his products in the market.

10. The market gardener must secure market reports and understand prevailing conditions. He makes daily or frequent trips to market, according to conditions.

11. The market gardener finds it necessary to keep detailed and accurate accounts of expenditures and income.

12. The market gardener considers the roadside stand another possible source of income. Much depends upon the location of his farm.

13. The market gardener must keep his machinery and equipment in repair.

*14. When confronted with such problems as: (1) finding new and better methods of production; (2) the best way to combat insect pests; (3) how to keep vegetables in the best condition for marketing, the market gardener does not hesitate to get in touch with experts for advice. The market gardener must allow time for reading and study. The reported results of scientific experiments carried on by experiment stations and model farms should prove very helpful.

8. The market gardener supervises, or actually does, the plowing, fertilizing, planting, cultivating, transplanting, harvesting and marketing of the crops.

9. The manager of a large market garden arranges for the packing and labelling of his products in attractive and convenient packages. This will help to identify his products in the market.

10. The market gardener must secure market reports and understand prevailing conditions. He makes daily or frequent trips to market, according to conditions.

11. The market gardener finds it necessary to keep detailed and accurate accounts of expenditures and income.

12. The market gardener considers the roadside stand another possible source of income. Much depends upon the location of his farm.

13. The market gardener must keep his machinery and equipment in repair.

14. When confronted with such problems as: (1) finding new and better methods of production; (2) the best way to combat insect pests; (3) how to keep vegetables in the best condition for marketing, the market gardener does not hesitate to get in touch with experts for advice. The market gardener must allow time for reading and study. The reported results of scientific experiments carried on by experiment stations and model farms should prove very helpful.

15. The market gardener may market his goods by (a) selling directly to consumers; (b) selling his products to commission merchants under contract; (c) joining a farmers' cooperative.

16. Another task of this worker is the hiring of assistants and directing their work. During rush seasons, these workers may be hired by the day.

17. Where the law so demands, the market gardener must grade his products, and fix prices accordingly.

Advantages and Disadvantages

1. One of the advantages of almost all agricultural occupations is that the work is healthful. The required tasks provide plenty of wholesome exercise and much outdoor work.

2. Winter brings a certain amount of leisure. This gives opportunity for rest, recreation or study.

3. The market gardener has the joy of working with growing things, and the opportunity to help improve his products through experimentation and cultivation.

4. The market gardener may feel that he is rendering an important service to his community. He is also able to supply his own table with sufficient and healthful foods at low cost.

5. The market gardener usually lives near enough the city to take advantage of the social and educational opportunities offered there.

15. The market gardener may market his goods by (a) selling directly to consumers; (b) selling his products to commission merchants under contract; (c) joining a farmers' cooperative.

16. Another task of this worker is the hiring of assistants and directing their work. During rush seasons, these workers may be hired by the day.

17. Where the law so demands, the market gardener must grade his products, and fix prices accordingly.

Advantages and Disadvantages

1. One of the advantages of almost all agricultural occupations is that the work is healthful. The required tasks provide plenty of wholesome exercise and much outdoor work.

2. Winter brings a certain amount of leisure. This gives opportunity for rest, recreation or study.

3. The market gardener has the joy of working with growing things, and the opportunity to help improve his products through experimentation and cultivation.

4. The market gardener may feel that he is rendering an important service to his community. He is also able to supply his own table with sufficient and healthful foods at low cost.

5. The market gardener usually lives near enough the city to take advantage of the social and educational opportunities offered there.

6. The outlay of money for a small farm need not be large. This depends upon the size and location of the farm and the type of equipment needed.

7. The market gardener need not wait long months for financial returns. Frequent trips to market mean a steady income for the season.

8. The market gardener's work has a wholesome effect on his character. He learns that honesty in all his work really pays, and cooperation is the only way to success. His mind must be constantly alert to meet new problems. For these reasons the market gardener has the respect and confidence of the community.

The work has certain disadvantages. Among them we may list the following:

9. He has long hours of hard labor.

10. There are rush seasons when planting or harvesting must be done in record time.

11. Unavoidable losses through adverse weather, floods, sudden temperature changes, and the loss through insect pests and plant diseases make his income uncertain. Since his products are by nature perishable, delay in marketing, whatever the cause, will mean financial loss.

12. There is keen competition in this work.

13. The long winter months yield little or no income.

6. The outlay of money for a small farm need not be large. This depends upon the size and location of the farm and the type of equipment needed.

7. The market gardener need not wait long months for financial returns. Frequent trips to market mean a steady income for the season.

8. The market gardener's work has a wholesome effect on his character. He learns that honesty in all his work really pays, and cooperation is the only way to success. His mind must be constantly alert to meet new problems. For these reasons the market gardener has the respect and confidence of the community.

The work has certain disadvantages. Among them we may list the following:

9. He has long hours of hard labor.

10. There are rush seasons when planting or harvesting must be done in record time.

11. Unavoidable losses through adverse weather, floods, sudden temperature changes, and the loss through insect pests and plant diseases make his income uncertain. Since his products are by nature perishable, delay in marketing, whatever the cause, will mean financial loss.

12. There is keen competition in this work.

13. The long winter months yield little or no income.

Training

1. A man may learn something of this work by working for a market gardener. For the boy or girl, a home garden offers rich experience.

2. The best training may be gained by taking a four year course in an agricultural college.

*3. Courses in science, business management and economics are desirable, in addition to regular vocational agriculture.

Financial Returns

1. The income must necessarily depend upon several factors, among them: (a) the size of the farm and equipment; (b) nearness to market; (c) type of community served; (d) the variety of crops raised.

2. Farm assistants in the New England Area receive about $25.00 to $30.00 per month with board, and about $40.00 to $45.00 without board. This varies with market conditions. Government reports indicated an average for Rhode Island farm assistants in 1937 of $36.00 with board, and $70.00 without board, per month.

3. Day laborers receive approximately $1.25 a day without board.

Abilities Needed

1. The market gardener must have ability to plan ahead.

Training

1. A man may learn something of this work by working for a market gardener. For the boy or girl, a home garden offers rich experience.

2. The best training may be gained by taking a four year course in an agricultural college.

3. Courses in science, business management and economics are desirable, in addition to regular vocational agriculture.

Financial Returns

1. The income must necessarily depend upon several factors, among them: (a) the size of the farm and equipment; (b) nearness to market; (c) type of community served; (d) the variety of crops raised.

2. Farm assistants in the New England Area receive about $25.00 to $30.00 per month with board, and about $40.00 to $45.00 without board. This varies with market conditions. Government reports indicated an average for Rhode Island farm assistants in 1937 of $26.00 with board, and $70.00 without board, per month.

3. Day laborers receive approximately $1.25 a day without board.

Abilities Needed

1. The market gardener must have ability to plan ahead.

2. He must be willing to work long hours, study the latest reports on his specialties, and be eager to try out new ideas.

3. The market gardener must enjoy working with growing things. Even though the harvest seems long in coming, and losses come, he must have patience and perseverance.

4. He must be able to direct his assistants. This calls for good management, especially during the rush seasons.

5. The market gardener must be a business man as well as a farmer. Salesmanship ability, a cooperative spirit, in addition to a fund of knowledge on gardening are needed.

6. Much of his success will depend upon his character, and upon his reputation in the community.

7. The market gardener should have a scientific attitude toward work, good judgment, and the ability to make decisions.

8. To be able to do his work well and to enter the keen competition which confronts him, the market gardener needs good health, strength, and ambition to succeed.

Incidental Learning Products

1. An increasing appreciation of the importance of this worker in our everyday life.

2. An appreciation of the superior energy and intelligence needed to carry on this work in the face of changing

2. He must be willing to work long hours, study the latest reports on his specialties, and be eager to try out new ideas.

3. The market gardener must enjoy working with growing things. Even though the harvest seems long in coming, and losses come, he must have patience and perseverance.

4. He must be able to direct his assistants. This calls for good management, especially during the rush seasons.

5. The market gardener must be a business man as well as a farmer. Salesmanship ability, a cooperative spirit, in addition to a fund of knowledge on gardening are needed.

6. Much of his success will depend upon his character, and upon his reputation in the community.

7. The market gardener should have a scientific attitude toward work, good judgement, and the ability to make decisions.

8. To be able to do his work well and to enter the keen competition which confronts him, the market gardener needs good health, strength, and ambition to succeed.

Incidental Learning Products

1. An increasing appreciation of the importance of this worker in our everyday life.

2. An appreciation of the superior energy and intelligence needed to carry on this work in the face of changing

problems and scientific research.

Unit Assignment

(Time Allotment - 6 periods)

Introductory Period

Class Discussion: Did your family have a vegetable garden last year? If so, what vegetables did you raise? What garden implements did you use? What part of the work did your father do? What did you do? What became of the vegetables after they were picked? What plans have you made for garden this year?

"Our study of the vegetable or market gardener will include all the things that you have mentioned in this discussion. However your father's gardening methods and those of the market gardener will differ in several respects. Let us think of reasons for some of the differences."

Allow time for class responses and then summarize, stressing the following points:

(a) Your father raises vegetables for the family only. The market gardener raises vegetables to sell.

(b) Your father's garden yields a comparatively small crop.

A market gardener raises a large variety of vegetables in considerable quantity.

(c) Your father's income does not depend entirely upon the quality of his crops.

problems and scientific research.

Unit Assignment

(Time Allotment - 6 periods)

Introductory Period

Class Discussion: Did your family have a vegetable garden last year? If so, what vegetables did you raise? What garden implements did you use? What part of the work did your father do? What did you do? What became of the vegetables after they were picked? What plans have you made for garden this year?

"Our study of the vegetable or market gardener will include all the things that you have mentioned in this discussion. However your father's gardening methods and those of the market gardener will differ in several respects. Let us think of reasons for some of the differences."

Allow time for class responses and then summarize, stressing the following points:

(a) Your father raises vegetables for the family only. The market gardener raises vegetables to sell.

(b) Your father's garden yields a comparatively small crop.

A market gardener raises a large variety of vegetables in considerable quantity.

(c) Your father's income does not depend entirely upon the quality of his crops.

The market gardener's income depends upon his ability to get the best possible crops to sell at the most favorable prices. This necessitates a fine selection of seeds, wise planning, intensive cultivation and care in the transportation of market crops.

(d) Your father's garden does not need to be ready for harvest at any particular time.

The market gardener must get his crops to market at the earliest possible moment in order to take advantage of the high prices. He may not delay the marketing because his products are perishable.

Class Exercise: (Use the blackboard)

"Let us review the six broad questions that should be considered in the study of any occupation. We shall apply these questions very briefly to the study of the market gardener."

Service to Others: or Why do we need this worker?

Example. The market gardener provides healthful foods.

Required Tasks: or What Work Must He Do?

Example. He makes careful plans for the gardens.

Advantages and Disadvantages: or What are the good and bad points?

Examples. He works with growing things. His hours are very long.

Training: or How may the worker learn this occupation?

The market gardener's income depends upon his ability to get the best possible crops to sell at the most favorable prices. This necessitates a fine selection of seeds, wise planning, intensive cultivation and care in the transportation of market crops.

(d) Your farmer's garden does not need to be ready for harvest at any particular time.

The market gardener must get his crops to market at the earliest possible moment in order to take advantage of the high prices. He may not delay the marketing because his products are perishable.

Class Exercise: (Use the blackboard)

"Let us review the six broad questions that should be considered in the study of any occupation. We shall apply these questions very briefly to the study of the market gardener."

Service to Others: or Why do we need this worker?

Example. The market gardener provides healthful foods.

Required Tasks: or What work must he do?

Example. He makes careful plans for the gardens.

Advantages and Disadvantages: or What are the good and bad points?

Examples. He works with growing things. His hours are very long.

Training: or How may the worker learn this occupation?

Example. The best training is given at the agricultural college.

Financial Returns: or How is his income determined?

Example. The income will depend upon the size and the location of his farm.

Abilities Needed: or What kind of man will succeed?

Example. He must be able to do strenuous work.

Arrange for a display of pictures during this discussion. (This will aid pupils in understanding the concepts. Since this is the first application of our study outline to a specific occupation enough time must be given to make it clear. The teacher should collect, label, and file all pictorial matter brought in. This will make excellent possible selection for projector lesson, as well as material for posters, exhibits, and bulletin board displays.)

Individual Work Period

(SG Note) Many of these questions require your careful thinking. You will not find all the answers in books. Talk to your father and mother about it, and discuss it with others in your class. Best of all, talk to a general farmer or a market gardener.

Service to Others

(SG-1) Your mother usually plans to include a certain proportion of vegetables in your meals. Why? Why is it possible for you to have so many different kinds of

Example. The best training is given at the agricultural college.

Financial Returns: or How is his income determined?

Example. The income will depend upon the size and the location of his farm.

Abilities Needed: or What kind of man will succeed?

Example. He must be able to do strenuous work.

Arrange for a display of pictures during this discussion. (This will aid pupils in understanding the concepts. Since this is the first application of our study outline to a specific occupation enough time must be given to make it clear. The teacher should collect, label, and file all pictorial matter brought in. This will make excellent possible selection for projector lesson, as well as material for posters, exhibits, and bulletin board displays.)

Individual Work Period

(SS Note) Many of these questions require your careful thinking. You will not find all the answers in books. Talk to your father and mother about it, and discuss it with others in your class. Best of all, talk to a general farmer or a market gardener.

Service to Others

(SG-1) Your mother usually plans to include a certain proportion of vegetables in your meals. Why? Why is it possible for you to have so many different kinds of

vegetables? *What are some reasons for the increase in vegetable growing in our country? (11) pp. 79-80.

Required Tasks

(SG-2) What is the meaning of each of the following terms? - (a) Market Gardening; (b) Truck Farming; (*) Canning Gardens; (*d) Vegetable Forcing. (14) p 22.

(SG-3) *What are some questions that a beginner should ask before buying a piece of land for market gardening? (14) p 5; (3) pp 170-171; (4) p 63.

(SG-4) How can a market gardener get his vegetables to market long before your own garden is ready? (1) p 9; (4) pp 63-64.

(SG-5) Make a list of all the different jobs a market gardener must do in planning, cultivating, harvesting and marketing. *Begin with the making of plans for his garden and end with the marketing of the last crop. (1) pp 92-93; (3) p 171; (4) p 63; (9) pp 19-20; 61-63; (11) p 79; (12) p 248; (14) pp 5-19; (15) pp 1; 11; (16) pp 123-141.

(SG-6) How may a market gardener find out how to improve his farm?

Advantages and Disadvantages

(SG-7) What advantages does the market gardener enjoy? For example, how does the work affect his health? What are some disadvantages? For example, how may a market gardener lose money? (1) pp 93-94; (15) pp 1, 2, 4; (8) pp 16-17.

vegetables? What are some reasons for the increase in vegetable growing in our country? (11) pp. 79-80.

Required Tasks

(30-2) What is the meaning of each of the following terms - (a) Market Gardening; (b) Truck Farming; (c) Canning Gardens; (d) Vegetable Forcing. (14) p 22.

(30-3) What are some questions that a beginner should ask before buying a piece of land for market gardening? (14) p 5; (3) pp 170-171; (4) p 63.

(30-4) How can a market gardener get his vegetables to market long before your own garden is ready? (1) p 9; (4) pp 63-64.

(30-5) Make a list of all the different jobs a market gardener must do in planning, cultivating, harvesting and marketing. Begin with the making of plans for his garden and end with the marketing of the last crop. (1) pp 98-99; (3) p 171; (4) p 63; (9) pp 19-20; 81-83; (11) p 79; (12) p 240; (14) pp 5-19; (15) pp 1; 11; (16) pp 123-141.

(30-6) How may a market gardener find out how to improve his farm?

Advantages and Disadvantages

(30-7) What advantages does the market gardener enjoy? For example, how does the work affect his health? What are some disadvantages? For example, how may a market gardener lose money? (1) pp 93-94; (15) pp 1, 2, 4; (8) pp 16-17.

Training

(*SG-8) If you are acquainted with a market gardener, ask him how he learned the work. What is the best way for a young man to learn market gardening? *What studies in addition to agricultural courses would help him? (14) p. 21; (4) p. 73; (15) p 3.

Financial Returns

(SG-9) Do you think all market gardeners make the same amount of money? Why or why not? Upon what does the income depend? What is the average pay of a hired man? If you cannot find the answer, ask your teacher to discuss this with your class. (14) p 20; (4) p 75. See also general list.

Abilities Needed

(SG-10) What kind of a man would probably be most successful as a market gardener? Why? What kind of a market gardener would you like to work for? From what type of market gardener would your family or grocer want to buy vegetables? Why? (14) pp 20-22; (4) pp 75-76; (15) p 3.

(SG-11) Write a brief summary of what you have learned through this study and hand it to your teacher for approval.

(During the work period, the teacher acts as guide, assisting pupils to locate information, interpreting and clarifying readings. Small or large group discussion may be carried on informally.)

(SG-12) As soon as the required work is completed,

Training

(35-8) If you are acquainted with a market gardener, ask him how he learned the work. What is the best way for a young man to learn market gardening? What studies in addition to agricultural courses would help him? (14) p. 21; (4) p. 75; (15) p 3.

Financial Returns

(35-9) Do you think all market gardeners make the same amount of money? Why or why not? Upon what does the income depend? What is the average pay of a hired man? If you cannot find the answer, ask your teacher to discuss this with your class. (14) p 20; (4) p 75. See also general list.

Aptitude Needed

(35-10) What kind of a man would probably be most successful as a market gardener? Why? What kind of a market gardener would you like to work for? From what type of market gardener would your family or grocer want to buy vegetables? Why? (14) pp 20-22; (4) pp 75-76; (15) p 3.

(35-11) Write a brief summary of what you have learned through this study and hand it to your teacher for approval.

(During the work period, the teacher acts as guide, assisting pupils to locate information, interpreting and clarifying readings. Small or large group discussion may be carried on informally.)

(35-12) As soon as the required work is completed,

choose an optional activity from the file and arrange to present your findings to the class.

References for Unit II

1. Zeigler, Samuel H. & Jaquette, Helen, Choosing an Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

2. Gowin, Wheatley, and Brewer, Occupations, Ginn & Co., Boston, Mass., 1923.

3. Hill, Howard C., Vocational Civics, Ginn & Co., Boston, Mass., 1928.

4. Proctor, William Martin, Vocations, Houghton, Mifflin Co., New York, N. Y., 1933.

5. Davis, Frank G. & Davis, B. Carnall, Guidance for Youth, Ginn & Co., Boston, Mass., 1928.

6. Lynn, Bernard J., Getting a Living, Franklin Publishing Supply Co., Boston, Mass., 1921.

7. Edmonson, James B. & Dondineau, Arthur, Vocations Through Problems, The MacMillan Co., New York, N. Y., 1937.

8. Platt, Rutherford, Book of Opportunities, G. Putnam and Sons, New York, N. Y., 1926.

9. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

10. Ernst, Clayton, What Shall I Be?, D. Appleton and Co., Boston, Mass., 1931.

11. Holbrook and Macgregor, Our World of Work, Allyn and Bacon Co., Boston, Mass., 1929.

12. Brewer, John M., Occupations, Ginn & Co., Boston, Mass., 1937.

13. Cottler, Joseph, Brecht, Harold, Careers Ahead, Little, Brown and Co., Boston, Mass., 1937.

14. Success pamphlet, "Market Gardening". Vocational Information Series, Directed by Chlous Shade, Morgan-Dillon, Publishers, 1937.

choose an optional activity from the file and arrange to present your findings to the class.

References for Unit II

1. Zeigler, Samuel H. & Jaquette, Helen. Choosing an Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

2. Gowin, Wheatley, and Brewer, Occupations, Ginn & Co., Boston, Mass., 1923.

3. Hill, Howard C., Vocational Civics, Ginn & Co., Boston, Mass., 1922.

4. Proctor, William Martin, Vocations, Houghton, Mifflin Co., New York, N. Y., 1923.

5. Davis, Frank G. & Davis, B. Carnell, Guidance for Youth, Ginn & Co., Boston, Mass., 1928.

6. Lynn, Bernard T., Getting a Living, Franklin Publishing Supply Co., Boston, Mass., 1921.

7. Edmonson, James B. & Dondineau, Arthur, Vocations Through Problems, The MacMillan Co., New York, N. Y., 1927.

8. Platt, Rutherford, Book of Opportunities, G. Putnam and Sons, New York, N. Y., 1922.

9. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1920.

10. Ernst, Clayton, What Shall I Be?, T. Appleton and Co., Boston, Mass., 1921.

11. Holbrook and Macgregor, Our World of Work, Allyn and Bacon Co., Boston, Mass., 1928.

12. Brewer, John M., Occupations, Ginn & Co., Boston, Mass., 1927.

13. Cottler, Joseph, Brecht, Harold, Careers Ahead, Little, Brown and Co., Boston, Mass., 1927.

14. Success pamphlet, "Market Gardening". Vocational Information Series, Directed by Chloua Shade, Morgan-Dillon, Publishers, 1927.

15. Monograph, Horticulture as a Career, The Institute for Research, Chicago, Ill., 1930.

16. Power, R. A. and Kinlin, East Vincent Handbook of Farming for Boys and Girls, E. M. Hale Co., Milwaukee, Wis., 1937.

Note: Look back to the reading list following Unit I. Many of these books do not mention the market gardener but give information that could apply to his work as well as to the work of farmers in general. Be sure to read some of these books.

Optional Activities

1. Plan a market gardening exhibit in your classroom or home room. Make it attractive so that others will stop to look at it. Be sure to make it tell as much as possible about the market gardener. Use pictures, books, charts, or objects. The librarian will be interested to help. Your classmates will learn much from a fine exhibit.

2. Read the article entitled "The Big Freeze" in the Reader's Digest of November, 1937, and make a report to the class.

3. Have you ever used any of the frozen foods? Ask your grocer if he carries a particular brand, or find out where you can see frozen foods. How are these foods kept fresh?

4. Find out from your grocer where the fresh vegetables in his store come from. How many are Rhode Island products?

15. Monograph. Horticulture as a Career. The Institute for Research. Chicago, Ill., 1930.

16. Power, R. A. and Kimlin, Kent Vincent Handbook of Farming for Boys and Girls. R. M. Hale Co., Milwaukee, Wis., 1927.

Note: Look back to the reading list following Unit I. Many of these books do not mention the market gardener but give information that could apply to his work as well as to the work of farmers in general. Be sure to read some of these books.

Optional Activities

1. Plan a market gardening exhibit in your classroom or home room. Make it attractive so that others will stop to look at it. Be sure to make it tell as much as possible about the market gardener. Use pictures, books, charts, or objects. The librarian will be interested to help. Your classmates will learn much from a fine exhibit.

2. Read the article entitled "The Big Freeze" in the Reader's Digest of November, 1937, and make a report to the class.

3. Have you ever used any of the frozen foods? Ask your grocer if he carries a particular brand, or find out where you can see frozen foods. How are these foods kept fresh?

4. Find out from your grocer where the fresh vegetables in his store come from. How many are Rhode Island products?

Do any come to him directly from the farms? Why or why not?

5. Have you ever visited the Fruit Terminal? If you have had that opportunity, tell the class about it.

6. Make a list of the tools that a market gardener might need. Perhaps you can find the catalogue prices on these tools. Make a series of original drawings or cut pictures from the catalogue. About how much would a fairly complete equipment of market garden tools cost?

7. Write an imaginary diary for the market gardener, a page for each month, beginning with January and ending in December. Perhaps a group would like to work with you. Be sure to consult the librarian for books that will help. Illustrate your booklet if possible.

8. A market gardener can make extra money by building an attractive wayside stand. What should be considered in building such a stand? Draw a plan or a picture of how you think it should look.

9. How does a market gardener make a cold frame? a hot bed? Make a working drawing of each and explain the reason for their use.

10. Make a "Market Gardening" notebook. Include a complete account of this occupation, a list of the books from which you gained your information, and illustrations.

11. Look through a number of farm magazines. What articles would interest the market gardener? Read these

Do any come to him directly from the farmer? Why or why not?

5. Have you ever visited the Fruit Terminal? If you have had that opportunity, tell the class about it.

6. Make a list of the tools that a market gardener might need. Perhaps you can find the catalogue prices on these tools. Make a series of original drawings or cut pictures from the catalogue. About how much would a fairly complete equipment of market garden tools cost?

7. Write an imaginary diary for the market gardener, a page for each month, beginning with January and ending in December. Perhaps a group would like to work with you. Be sure to consult the librarian for books that will help. Illustrate your booklet if possible.

8. A market gardener can make extra money by building an attractive movable stand. What should be considered in building such a stand? Draw a plan or a picture of how you think it should look.

9. How does a market gardener make a cold frame? a hot bed? Make a working drawing of each and explain the reason for their use.

10. Make a "Market Gardening" notebook. Include a complete account of this occupation, a list of the books from which you gained your information, and illustrations.

11. Look through a number of farm magazines. What articles would interest the market gardener? Read these

articles and take from them any information in which the class will be interested.

12. Make a table showing when the various vegetables may be planted in the open field. A book on vegetable raising should help.

13. Write to the United States Department of Agriculture to find out what leaflets are published that would help the market gardener.

14. Make a series of drawings showing the market gardener at work.

15. Let's pretend that you are a reporter. Interview Mr. Brown, a market gardener, and write it up for a newspaper. Don't forget the human interest as well as the factual side.

16. Draw a cartoon depicting one problem of the market gardener.

17. Write to the State Department of Agriculture requesting a copy of any rules and regulations pertaining to the raising, grading, and marketing of vegetables.

18. Collect interesting articles pertaining to market gardening from newspapers. Watch the Farm News Column and the Question and Answer Service.

19. Consult a seed catalogue. If you were a market gardener how would you go about ordering seed? Testing it?

20. Market gardeners should keep strict accounts. What are some of the expenditures that a market gardener would

articles and take from them any information in which the class will be interested.

12. Make a table showing when the various vegetables may be planted in the open field. A book on vegetable raising should help.

13. Write to the United States Department of Agriculture to find out what leaflets are published that would help the market gardener.

14. Make a series of drawings showing the market gardener at work.

15. Let's pretend that you are a reporter. Interview Mr. Brown, a market gardener, and write it up for a newspaper. Don't forget the human interest as well as the factual side.

16. Draw a cartoon depicting one problem of the market gardener.

17. Write to the State Department of Agriculture requesting a copy of any rules and regulations pertaining to the raising, grading, and marketing of vegetables.

18. Collect interesting articles pertaining to market gardening from newspapers. Watch the Farm News Column and the Question and Answer Service.

19. Consult a seed catalogue. If you were a market gardener how would you go about ordering seed? Testing it?

20. Market gardeners should keep strict accounts. What are some of the expenditures that a market gardener would

probably have to enter in his account book?

21. Prepare a poster or chart showing the food value of some of our most common vegetables.

22. Prepare a short play which will bring out the importance of the market gardener in our every day life. Some of your friends will enjoy working with you.

23. Look up the term "migrants" as applied to agriculture. What does it mean? What about the education of the boys and girls of migrant families?

24. Our vegetables have been continually improved by scientific growers. Look up the story of the origin of our vegetables.

25. A general farmer and a market gardener have been discussing the relative advantages and disadvantages of their work. Write the dialogue.

26. Design an attractive label for the boxes or paper wrappers of a market gardener. You will want to choose a trade name.

27. If a market gardener sold all his celery to a commission merchant, what would he have to do? What would the commission merchant do?

28. Make a list of the vegetables included in your meals for one week. Give reasons why your mother included those particular ones.

29. What market garden products does Rhode Island

probably have to enter in his account book?

21. Prepare a poster or chart showing the food value of some of our most common vegetables.

22. Prepare a short play which will bring out the importance of the market gardener in our every day life. Some of your friends will enjoy working with you.

23. Look up the term "migrants" as applied to agriculture. What does it mean? What about the education of the boys and girls of migrant families?

24. Our vegetables have been continually improved by scientific growers. Look up the story of the origin of our vegetables.

25. A general farmer and a market gardener have been discussing the relative advantages and disadvantages of their work. Write the dialogue.

26. Design an attractive label for the boxes or paper wrappers of a market gardener. You will want to choose a trade name.

27. If a market gardener sold all his celery to a commission merchant, what would he have to do? What would the commission merchant do?

28. Make a list of the vegetables included in your meals for one week. Give reasons why your mother included those particular ones.

29. What market garden products does Rhode Island

raise? Represent these on a poster.

30. Make a series of small posters which tell something of the occupation of the market gardener.

31. Joe had a chance to be errand boy in a store or to work on a vegetables farm. He found it hard to decide. What would you advise? Write a letter to Joe telling him which you think is best as a job for the summer vacation.

32. A market gardener living in California has shipped some asparagus to the East for the early market. How is it shipped? Through what hands must it pass?

33. Make an air map of the locality that would be suitable for market gardening.

34. If you have worked on a farm, plan to tell the class of your experience.

35. Look up the State College Catalogue. What courses should a boy planning to be a market gardener take? Why?

36. Map out a 4-H Club program that would help a boy to know more about this work.

37. What do you think is one important point to remember about the market gardener? Depict this point in the form of a poster or blackboard drawing.

38. Consult some of the Geographic Magazines which will tell you where vegetables are grown on a large scale. Make a picture map of the country or a section of the country indicating vegetables grown.

raise? Depresent these on a poster.

30. Make a series of small posters which tell something of the occupation of the market gardener.

31. Joe had a chance to be around boy in a store or to work on a vegetables farm. He found it hard to decide. What would you advise? Write a letter to Joe telling him which you think is best as a job for the summer vacation.

32. A market gardener living in California has shipped some asparagus to the East for the early market. How is it shipped? Through what hands must it pass?

33. Make an air map of the locality that would be suitable for market gardening.

34. If you have worked on a farm, plan to tell the class of your experience.

35. Look up the State College Catalogue. What courses should a boy planning to be a market gardener take? Why?

36. Map out a 4-H Club program that would help a boy to know more about this work.

37. What do you think is one important point to remember about the market gardener? Depict this point in the form of a poster or blackboard drawing.

38. Consult some of the Geographic Magazines which will tell you where vegetables are grown on a large scale. Make a picture map of the country or a section of the country indicating vegetables grown.

Class Presentation Period

The presentation period will be governed by the extent to which the optional activities have been carried out. It will include: (a) Discussion of points which, according to summaries, need emphasis; (b) The presentation of special reports; (c) The presentation of original drawings and explanations; (d) Assembling of pictures and exhibits with explanations.

Mastery Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

In recent years, the business of market 1.....
gardening has (1) greatly. (2) roads, 2.....
scientific ways of (3) vegetables and rapid 3.....
means of (4) vegetables to (5) have made 4.....
this growth possible. The market gardener 5.....
needs comparatively little (6) to start his 6.....
business.

In this section of the country the market
gardener has some (7) time during the winter. 7.....

1. good
2. income
3. preserving
4. interest
5. decreased
6. transporting
7. busy
8. increased
9. activity
10. leisure
11. capital
12. rough
13. market

Class Presentation Period

The presentation period will be governed by the extent to which the optional activities have been carried out. It will include: (a) Discussion of points which, according to summaries, need emphasis; (b) The presentation of special reports; (c) The presentation of original drawings and explanations; (d) Assembling of pictures and exhibits with explanations.

Mastery Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

In recent years, the business of market gardening has (1) greatly. (2) roads, scientific ways of (3) vegetables and rapid means of (4) vegetables to (5) have made this growth possible. The market gardener needs comparatively little (6) to start his business. 1.....

In this section of the country the market gardener has some (7) time during the winter. 2.....

3.....

4.....

5.....

6.....

7.....

1. good	5. decreased	9. activity
2. income	6. transporting	10. leisure
3. preserving	7. busy	11. capital
4. interest	8. increased	12. rough
		13. market

The market gardener specializes in the raising of (8). Such gardens were at first 8.....
known as (9) gardens. 9.....

Today the growing of vegetables by the farmers brings an income of (10) of dollars 10.....
every year.

The market gardener provides us with foods 11.....
that are (11), and (12). The large number 12.....
of products available makes for pleasing (13). 13.....

Vegetable forcing is usually done in the
(14). 14.....

Before deciding upon the kind of gardens, 15.....
he must consider both (15) and (16). 16.....

The market gardener must plan (17) so 17.....
that his crops will be ready for market when
prices are most (18). 18.....

1. greenhouse
2. truck
3. trees
4. vegetables
5. open field
6. soil
7. fresh
8. ahead
9. trade
10. grains
11. rivers
12. millions
13. baked
14. variety
15. healthful
16. climate
17. few hundred
18. vegetables
19. indigestible
20. undecided
21. desirable

The market gardener specializes in the raising of (6). Such gardens were at first 8.....
known as (8) gardens. 9.....

Today the growing of vegetables by the farmers brings an income of (10) of dollars 10.....
every year.

The market gardener provides us with foods 11.....
that are (11), and (12). The large number 12.....
of products available makes for pleasing (13). 13.....

Vegetable forcing is usually done in the
(14). 14.....

Before deciding upon the kind of gardens, 15.....
he must consider both (15) and (16). 16.....

The market gardener must plan (17) so 17.....
that his crops will be ready for market when
prices are most (18). 18.....

1. greenhouse	8. ahead	15. healthful
2. truck	9. trade	16. climate
3. trees	10. grains	17. few hundred
4. vegetables	11. rivers	18. vegetables
5. open field	12. millions	19. indigestible
6. soil	13. baked	20. undecided
7. fresh	14. variety	21. desirable

Plants may be started in (19) frames, 19.....
hot (20), or in the (21). These plants are 20.....
then (22) to the field as soon as the (23) 21.....
permits. 22.....

The market gardener must use plenty of 23.....
(24) because he wants a (25) yield per acre. 24.....
This is called (26) gardening. 25.....

He must arrange for a good system of 26.....
(27) in order that his plants may receive 27.....
enough water.

The market gardener must supervise or 28.....
actually do such tasks as (28), (29), 29.....
transplanting, cultivating, (30) and finally 30.....
marketing the crops.

The market gardener should keep accurate 31.....
(31) of all (32) as well as income. 32.....

1. high
2. account
3. scattered
4. cold
5. plowing
6. descriptions
7. weather
8. refrigerator
9. hot
10. beds
11. expenditures
12. machines
13. intensive
14. planting
15. demanding
16. transplanted
17. frames
18. fertilizer
19. storm
20. greenhouse
21. low
22. irrigation
23. sand
24. harvesting

Plants may be started in (19) frames, 19.....
hot (20), or in the (21). These plants are 20.....
then (22) to the field as soon as the (23) 21.....
permits. 22.....

The market gardener must use plenty of 23.....
(24) because he wants a (25) yield per acre. 24.....
This is called (26) gardening. 25.....

He must arrange for a good system of 26.....
(27) in order that his plants may receive 27.....
enough water.

The market gardener must supervise or 28.....
actually do such tasks as (28), (29), 29.....
transplanting, cultivating, (30) and finally 30.....
marketing the crops.

The market gardener should keep accurate 31.....
(31) of all (32) as well as income. 32.....

1. high	9. hot	17. frames
2. account	10. beds	18. fertilizer
3. scattered	11. expenditures	19. storm
4. cold	12. machines	20. greenhouses
5. plowing	13. intensive	21. low
6. descriptions	14. planting	22. irrigation
7. weather	15. demanding	23. seed
8. refrigerator	16. transplanted	24. harvesting

To get better prices, the market gardener sorts and (33) his products. 33.....

The work is (34) and gives him plenty of (35) in the open air. During the (36) the market gardener will have some leisure time. 34..... 35..... 36.....

The market gardener works with (37) things and may feel that he is (38) to the health of the community. 37..... 38.....

The market gardener's income is (39) steady than that of the dairyman for the dairyman works the year round. 39.....

The market gardener has (40) seasons as well as dull seasons. The hours are (41) and because of this the worker often gets very (42) physically. 40..... 41..... 42.....

The market gardener may (43) money through sudden changes in (44). 43..... 44.....

1. lose
2. grade
3. light
4. long
5. weather
6. important
7. more
8. growing
9. diseases
10. harmful
11. healthful
12. tired
13. rush
14. dull
15. exercise
16. make
17. less
18. luxurious
19. summer
20. winter
21. soil

To get better prices, the market gardener

sorts and (33) his products. 33.....

The work is (34) and gives him plenty of 34.....

(35) in the open air. During the (36) the 35.....

market gardener will have some leisure time. 36.....

The market gardener works with (37) 37.....

things and may feel that he is (38) to the 38.....

health of the community.

The market gardener's income is (39) 39.....

steady than that of the dairyman for the

dairymen works the year round.

The market gardener has (40) seasons 40.....

as well as dull seasons. The hours are (41) 41.....

and because of this the worker often gets

very (42) physically. 42.....

The market gardener may (43) money 43.....

through sudden changes in (44). 44.....

1. lose	5. growing	15. exercise
2. grade	6. diseases	16. make
3. light	10. harmful	17. less
4. long	11. healthful	18. luxurious
5. weather	12. tired	19. summer
6. important	13. rush	20. winter
7. more	14. dull	21. soil

CHAPTER IV

THE DAIRY FARMER

The Unit

The great extent of the dairy industry in the United States is one indication of its importance. Milk contains all the various food elements essential to growth, and is therefore considered the most perfect food. The welfare of society requires the rigid enforcement of high standards in the production and distribution of dairy products. The problems of modern and sanitary equipment, the selection and care of stock, and the keen competition in marketing demand scientific methods and superior business ability in the worker. The dairy farmer who is thus qualified will find, in addition to the opportunity for growth and service, adequate financial returns for his labor.

(Time Allotment - six periods)

Delimitation of Unit III

Service to Others:

1. The dairy farmer provides food that is highly nutritious.

CHAPTER IV

THE DAIRY FARMER

The Unit

The great extent of the dairy industry in the United States is one indication of its importance. Milk contains all the various food elements essential to growth, and is therefore considered the most perfect food. The welfare of society requires the rigid enforcement of high standards in the production and distribution of dairy products. The problems of modern and sanitary equipment, the selection and care of stock, and the keen competition in marketing demand scientific methods and superior business ability in the worker. The dairy farmer who is thus qualified will find, in addition to the opportunity for growth and service, adequate financial returns for his labor.

(Time Allotment - six periods)

Delimitation of Unit III

<u>Service to Others:</u>

1. The dairy farmer provides food that is highly <u>nutritious</u>.

2. He is important to the health of the community for he provides milk that is pure and sanitary. Through the maintenance of high standards, he protects people from disease.

3. Milk is the basis of many special diets, particularly for people who are ill or convalescing, and for very young children.

4. The dairy farmer who sells directly to customers makes possible the delivery of milk to the home at hours convenient to the housewife.

5. It is the dairy farmer who provides such foods as butter, cheese and ice cream. Through his products we are able to enjoy a wide variety of tasty foods.

*6. The milk production of the dairy cow has increased tremendously as principles of breeding have been more clearly understood.

*7. Dairying "furnishes about one fourth of America's total farm income."1/

Required Tasks

1. As in other types of agriculture there are three kinds of workers: (a) the dairy farm manager; (b) the foreman and regular assistants; (c) the laborers.

2. The dairy farmer should select a location as near

1/ (Brewer: John M. "Occupations" page 245 Ginn & Co. Boston, 1936

2. He is important to the health of the community for he provides milk that is pure and sanitary. Through the maintenance of high standards, he protects people from disease.

3. MILK is the basis of many special diets, particularly for people who are ill or convalescing, and for very young children.

4. The dairy farmer who sells directly to customers makes possible the delivery of milk to the home at hours convenient to the housewife.

5. It is the dairy farmer who provides such foods as butter, cheese and ice cream. Through his products we are able to enjoy a wide variety of tasty foods.

6. The milk production of the dairy cow has increased tremendously as principles of breeding have been more clearly understood.

7. Dairying furnishes about one fourth of America's total farm income.[1]

Required Tasks

1. As in other types of agriculture there are three kinds of workers: (a) the dairy farm manager; (b) the foreman and regular assistants; (c) the laborers.

2. The dairy farmer should select a location as near

[1] Brewster, John M. "Occupations" page 245 Ginn & Co. Boston, 1938

the city or population center as possible. This will mean a saving in time and money as well as easy access to market.

3. He should select his stock very carefully for the quality and productiveness of his cows will determine his income to a large degree.

4. Barns that are well lighted, airy, clean and convenient in arrangement should be provided. Cement floors and mangers are easiest to keep clean. Swinging stanchions are more comfortable than the stationary type. Dairy barns should be cleaned at least once a day, and clean straw used for bedding. Besides keeping the barns clean, the workers must provide for plenty of ventilation and yet maintain an even temperature to insure the best production.

5. The dairy farmer should wash each cow before milking. His hands must be clean and dry. The sanitary dairyman will put on clean clothes for milking. Where milking machines are used, care must be taken to see that each part of the machine has been sterilized before it is used.

6. The dairy utensils must be sterilized after using. Covered pails help to keep the milk clean.

7. Cows must be milked twice a day and every day in the week. The milk flows through a strainer into the covered pail. The milk must be cooled immediately after milking in order to kill harmful bacteria.

8. The dairy farmer should plan to raise at least part

the city or population center as possible. This will mean a saving in time and money as well as easy access to market.

3. He should select his stock very carefully for the quality and productiveness of his cows will determine his income to a large degree.

4. Barns that are well lighted, airy, clean and convenient in arrangement should be provided. Cement floors and mangers are easiest to keep clean. Swinging stanchions are more comfortable than the stationary type. Dairy barns should be cleaned at least once a day, and clean straw used for bedding. Besides keeping the barns clean, the workers must provide for plenty of ventilation and yet maintain an even temperature to insure the best production.

5. The dairy farmer should wash each cow before milking. His hands must be clean and dry. The sanitary dairyman will put on clean clothes for milking. Where milking machines are used, care must be taken to see that each part of the machine has been sterilized before it is used.

6. The dairy utensils must be sterilized after using. Covered pails help to keep the milk clean.

7. Cows must be milked twice a day and every day in the week. The milk flows through a strainer into the covered pail. The milk must be cooled immediately after milking in order to kill harmful bacteria.

8. The dairy farmer should plan to raise at least part

of the fodder for his herd. Scientific studies will reveal which crops are most nutritious. Barns and silos are needed to provide storage space for the fodder until it is used.

9. Adequate pasture must be provided. *When pasture land has lost its fertility or become bare, farmers may resort to the use of commercial fertilizer or the reseeding in order to grow a good quality of grass.

10. The modern dairy farmer often has weighing machines installed in the dairy barn. He weighs the milk from each cow night and morning. Records of food consumed as well as milk produced show which cows are profitable. Testing the milk for butter fat is one way to determine the quality of milk. *This is done by means of the Babcock test which was developed by Dr. Babcock nearly fifty years ago. As a result of these records, the efficient farmer decides what cows should be replaced, and what changed in feeding, housing or treatment should be tried.

11. The dairy farmer may pasteurize his milk on the farm. This calls for adequate equipment.

12. Many farmers have a "milk route". This means they sell directly to the customer. The farmer must arrange for the delivery of milk and keep accurate daily accounts of milk sold. When a farmer does not sell to customers, he must make contracts or agreements with commission men or cooperatives.

13. Cows need plenty of good clean water. Many farms

of the fodder for his herd. Scientific studies will reveal which crops are most nutritious. Barns and silos are needed to provide storage space for the fodder until it is used.

9. Adequate pasture must be provided. When pasture land has lost its fertility or become bare, farmers may resort to the use of commercial fertilizer or the reseeding in order to grow a good quality of grass.

10. The modern dairy farmer often has weighing machines installed in the dairy barn. He weighs the milk from each cow night and morning. Records of food consumed as well as milk produced show which cows are profitable. Testing the milk for butter fat is one way to determine the quality of milk. This is done by means of the babcock test which was developed by Dr. Babcock nearly fifty years ago. As a result of these records, the efficient farmer decides what cows should be replaced, and what changed in feeding, housing or treatment should be tried.

11. The dairy farmer may pasteurize his milk on the farm. This calls for adequate equipment.

12. Many farmers have a "milk route". This means they sell directly to the customer. The farmer must arrange for the delivery of milk and keep accurate daily accounts of milk sold. When a farmer does not sell to customers, he must make contracts or agreements with commission men or cooperatives.

13. Cows need plenty of good clean water. Many farms

are equipped with automatic drinking cups which supply water when pressed down.

14. The dairy farmer must know how to care for young calves.

15. Sick cows must be treated as soon as possible. A doctor that treats sick cows is called a veterinarian. Diseased cows must be separated from the herd so that healthy cows will not be infected.

16. The economical farmer will consider the use of manure as a means of fertilization. This will save him much money for he does not need so much commercial fertilizer.

17. The dairy standards are set up by the state. The requirements must be rigidly enforced in order to protect the health of the people. The dairy farmer must live up to State requirements.

18. The barns, cows, and milk houses must be ready for State inspection at any time.

19. The alert dairy farmer will read and study about the best scientific developments in the dairy industry.

Advantages and Disadvantages

1. The dairy farmer may feel that he gives important service to his community.

2. His work is varied, with plenty of outdoor exercise. The physical work is not too heavy.

3. The work with animals is interesting to one who is

are equipped with automatic drinking cups which supply water when pressed down.

14. The dairy farmer must know how to care for young calves.

15. Sick cows must be treated as soon as possible. A doctor that treats sick cows is called a veterinarian. Diseased cows must be separated from the herd so that healthy cows will not be infected.

16. The economical farmer will consider the use of manure as a means of fertilization. This will save him much money for he does not need so much commercial fertilizer.

17. The dairy standards are set up by the state. The requirements must be rigidly enforced in order to protect the health of the people. The dairy farmer must live up to state requirements.

18. The barns, cows, and milk houses must be ready for State inspection at any time.

19. The alert dairy farmer will read and study about the best scientific developments in the dairy industry.

Advantages and Disadvantages

1. The dairy farmer may feel that he gives important service to his community.

2. His work is varied, with plenty of outdoor exercise. The physical work is not too heavy.

3. The work with animals is interesting to one who is

fond of animals.

4. The dairy farmer has an opportunity to meet many people. His farm is often located near large population centers.

*5. There are many problems which demand clear thinking and continued study. Such a job challenges a man to adopt scientific methods and to improve his business.

6. The dairy farmer has work the year round. This means a steady income. This is a permanent and a growing industry, and he may look forward to a continued demand for his products.

7. There is not as much chance for heavy losses in dairying as in other types of farming. When a cow no longer produces milk, it can be sold for beef.

8. The farmer may utilize fairly rough land for pasture.

9. The dairy farmer is more independent than many city workers.

10. The making of cheese, butter and related products is possible if he wishes to enlarge his business.

11. The dairy farmer is able to supply his own table with those products which are very rich in food value.

12. Cooperative Associations have been established in the dairy business. The farmer may have a chance to join a Cooperative if he so desires.

food of animals.

4. The dairy farmer has an opportunity to meet many people. His farm is often located near large population centers.

*5. There are many problems which demand clear thinking and continued study. Such a job challenges a man to adopt scientific methods and to improve his business.

6. The dairy farmer has work the year round. This means a steady income. This is a permanent and a growing industry, and he may look forward to a continued demand for his products.

7. There is not as much chance for heavy losses in dairying as in other types of farming. When a cow no longer produces milk, it can be sold for beef.

8. The farmer may utilize fairly rough land for pasture.

9. The dairy farmer is more independent than many city workers.

10. The making of cheese, butter and related products is possible if he wishes to enlarge his business.

11. The dairy farmer is able to supply his own table with those products which are very rich in food value.

12. Cooperative Associations have been established in the dairy business. The farmer may have a chance to join a cooperative if he so desires.

13. On the other hand, it must be admitted that the hours are long. Cows must be milked regularly twice a day and seven days in the week. The milk must be cared for and delivered regardless of weather or season.

14. There is keen competition among dairymen.

15. Hours of study are necessary for best results in raising standards.

16. There is a chance for loss through disease. Milk, if not sold, will spoil, and this means less profit.

17. A considerable amount of capital is needed to begin the work.

Training

1. Simple aspects of the work may be learned as a hired boy. Many get fine training through the 4-H dairy clubs.

2. The best preparation is a four year course at an agricultural college.

3. The dairy farmer may take short unit courses at an agricultural college. The reports of the United States Department of Agriculture and Experiment Stations, and the continued study of modern ideas in books and magazines will help the farmer to gain the knowledge that he needs.

Financial Returns

The income of the dairy farmer will vary with the size of the herd, the location of the farm, and the quality of

13. On the other hand, it must be admitted that the hours are long. Cows must be milked regularly twice a day and seven days in the week. The milk must be cared for and delivered regardless of weather or season.

14. There is keen competition among dairymen.

15. Hours of study are necessary for best results in raising standards.

16. There is a chance for loss through disease. Milk, if not sold, will spoil, and this means less profit.

17. A considerable amount of capital is needed to begin the work.

Training

1. Simple aspects of the work may be learned as a hired boy. Many get fine training through the 4-H dairy clubs.

2. The best preparation is a four year course at an agricultural college.

3. The dairy farmer may take short unit courses at an agricultural college. The reports of the United States Department of Agriculture and Experiment Stations, and the continued study of modern ideas in books and magazines will help the farmer to gain the knowledge that he needs.

Financial Returns

The income of the dairy farmer will vary with the size of the herd, the location of the farm, and the quality of

production.

Abilities Needed

*1. First and foremost, the Dairy Farmer should have the ability to approach his problems in a scientific way. Knowledge of dairy science and its applications are essential.

2. This worker should be scrupulously clean, for cleanliness in a dairy farm means health.

3. This worker must understand and appreciate good stock and be able to judge and select cows that will prove profitable.

*4. The dairy farmer should be systematic and able to give attention to details.

5. A liking for animals is a first essential.

6. The dairy farmer should have the intelligence to plan ahead and be a good manager. He should be able to organize and direct the work of assistants.

7. No one who has not the willingness or ability to work long and hard should enter this occupation.

8. The progressive dairy farmer is alert to new ideas and willing to apply them, regardless of the time it will take.

9. The dairy farmer needs business ability.

10. The success of his enterprise depends in no small measure on his reputation for honesty, cleanliness, and scientific management.

production.

Abilities Needed

1. First and foremost, the Dairy Farmer should have the ability to approach his problems in a scientific way. Knowledge of dairy science and its applications are essential.

2. This worker should be scrupulously clean, for cleanliness in a dairy farm means health.

3. This worker must understand and appreciate good stock and be able to judge and select cows that will prove profitable.

4. The dairy farmer should be systematic and able to give attention to details.

5. A liking for animals is a first essential.

6. The dairy farmer should have the intelligence to plan ahead and be a good manager. He should be able to organize and direct the work of assistants.

7. No one who has not the willingness or ability to work long and hard should enter this occupation.

8. The progressive dairy farmer is alert to new ideas and willing to apply them, regardless of the time it will take.

9. The dairy farmer needs business ability.

10. The success of his enterprise depends in no small measure on his reputation for honesty, cleanliness, and scientific management.

*11. Dairying is a business which involves many workers from production to consumption. The keynote of success is cooperation.

Incidental Learning Products

1. An increasing appreciation of the importance of this worker in our everyday life.

2. An appreciation of the superior energy and intelligence necessary to carry on this work in the face of changing problems and scientific research.

Unit Assignment

(Approximate time allotment - six periods)

Introductory Period

Class Discussion: "When the milk man leaves your bottle of milk on the step, you do not hesitate to use that milk for your breakfast. Why is this true?" As a result of this discussion, the following points should be brought out:

1. Milk is a good food.

2. The milk is kept clean and sanitary.

3. The government requires that all dairy farms and establishments be registered with the State. They are regularly inspected to see that rules are obeyed in respect to cleanliness, care of milk, and health of cows and workers.

4. The government requires that milk be inspected on the farm, at the dealers, and in the delivery truck. The

*11. Dairying is a business which involves many workers from production to consumption. The keynote of success is cooperation.

Incidental Learning Products

1. An increasing appreciation of the importance of this worker in our everyday life.

2. An appreciation of the superior energy and intelligence necessary to carry on this work in the face of changing problems and scientific research.

Unit Assignment

(Approximate time allotment - six periods)

Introductory Period

Class Discussion: "When the milk man leaves your bottle of milk on the step, you do not hesitate to use that milk for your breakfast. Why is this true?" As a result of this discussion, the following points should be brought out:

1. Milk is a good food.

2. The milk is kept clean and sanitary.

3. The government requires that all dairy farms and establishments be registered with the State. They are regularly inspected to see that rules are obeyed in respect to cleanliness, care of milk, and health of cows and workers.

4. The government requires that milk be inspected on the farm, at the dealers, and in the delivery truck. The

The dairyman must keep his milk up to a certain standard in butter fat.

5. The milk must be labelled: "pasteurized", "raw", "certified", "Grade A", so that the customer will know what he is getting.

6. Failure to conform to state requirements means a fine, or loss of license."

"The dairy farmer's work includes the raising and care of clean and healthy milch cows, and the care and marketing of the milk according to the State regulations."

"Here are some of the Milk Rules of this State." (The dairy rules and regulations may be obtained from the State Board of Milk Supply or from the State Department of Agriculture.) Select such rules as have been suggested and read to the class.

Individual Work Period

(SG-1) Consult your Home Economics, Health, and Science teachers to find out why milk is considered such a fine food. Write a short paragraph on their answers.

(SG-2) Why are dairy rules and regulations so strictly enforced?

(*SG-3) Dairying is Rhode Island's leading agricultural industry. Why do you think this is so?

(*SG-4) Suppose your family could not get the usual supply of milk. How would it affect your daily living?

The dairyman must keep his milk up to a certain standard in butter fat.

5. The milk must be labelled: "pasteurized", "raw", "certified", "Grade A", so that the customer will know what he is getting.

6. Failure to conform to state requirements means a fine, or loss of license."

"The dairy farmer's work includes the raising and care of clean and healthy milch cows, and the care and marketing of the milk according to the State regulations."

"Here are some of the Milk Rules of this State." (The dairy rules and regulations may be obtained from the State Board of Milk Supply or from the State Department of Agriculture.) Select such rules as have been suggested and read to the class.

Individual Work Period

(SG-1) Consult your Home Economics, Health, and Science teachers to find out why milk is considered such a fine food. Write a short paragraph on their answers.

(SG-2) Why are dairy rules and regulations so strictly enforced?

(*SG-3) Dairying is Rhode Island's leading agricultural industry. Why do you think this is so?

(*SG-4) Suppose your family could not get the usual supply of milk. How would it affect your daily living?

(SG-5) A dairy farmer is a very busy man. His work begins early in the morning. What are some of the tasks he must do in order to (a) keep the cows clean and healthy? (b) take care of the milk from milking time to marketing? (c) keep barns and pastures in good condition? (d) keep records that will help him improve his business? (16) pp. 6-12; (3) p. 171; (15) pp. 275-281; (15) pp. 285-308; (4) pp. 54-56; (10) pp. 73-82; (1) pp. 86-87; (13) pp. 245-247; (6) pp. 48-51; (11) pp. 1, 21; (5) p. 27.

(SG-6) The dairyman feels that his work has many outstanding advantages. Make a list of the <u>five</u> advantages which you feel are the most important. (15) pp. 209-270; (6) p. 50; (17) p. 1; (5) pp. 28-29; (9) p. 14.

(SG-7) Some farmers do not want to bother with dairy cattle. They point out several disadvantages. What <u>three</u> disadvantages do you feel are very important? (3) p. 171; (15) p. 270; (6) pp. 28-29.

(SG-8) In what high school subjects besides agriculture should a boy <u>specialize</u> if he is planning to be a dairy farmer? Why? Look up the subjects under <u>Dairying</u> in a State College catalogue. What kind of an education is best for a modern dairy farmer? In what other ways may he learn? (6) p. 50; (5) p. 27; (17) p. 21.

(SG-9) A dairy farmer's income will depend upon a number of conditions. For example, high grade cows will give

(30-5) A dairy farmer is a very busy man. His work begins early in the morning. What are some of the tasks he must do in order to (a) keep the cows clean and healthy? (b) take care of the milk from milking time to marketing? (c) keep barns and pastures in good condition? (d) keep records that will help him improve his business? (16) pp. 6-12; (3) p. 171; (15) pp. 275-281; (16) pp. 285-306; (1) pp. 54-56; (10) pp. 75-82; (1) pp. 80-87; (13) pp. 245-247; (9) pp. 46-51; (11) pp. 1, 21; (5) p. 27.

(30-6) The dairyman feels that his work has many outstanding advantages. Make a list of the five advantages which you feel are the most important. (15) pp. 209-270; (6) p. 30; (17) p. 1; (5) pp. 28-29; (9) p. 14.

(30-7) Some farmers do not want to bother with dairy cattle. They point out several disadvantages. What three disadvantages do you feel are very important? (3) p. 171; (15) p. 270; (6) pp. 28-29.

(30-8) In what high school subjects besides agriculture should a boy specialize if he is planning to be a dairy farmer? Why? Look up the subjects under Dairying in a State College catalogue. What kind of an education is best for a modern dairy farmer? In what other ways may he learn? (6) p. 30; (5) p. 27; (17) p. 21.

(30-9) A dairy farmer's income will depend upon a number of conditions. For example, high grade cows will give

more milk. Make a list of the conditions that will affect his income. (15) p. 281; (6) p. 52; (17) p. 2; (5) p. 28.

(SG-10) From what kind of a dairy farm would you want your milk to come? Why? What kind of person would be most likely to succeed in dairy farming? Why? (6) p. 51; (5) p. 28; (17) p. 21.

(SG-11) Be sure to read the book entitled "Grindstone Farm" by Lent. It will help you to understand the dairy farmer's work. The librarian will allow you to take it home over-night.

(SG-12) Hand to your teacher a brief summary of the answers to the above questions.

(SG-12) Choose an optional activity from the card file and plan to present your work to the class.

Reading References for Unit III

1. Ziegler, Samuel, and Jaquette, Helen, Choosing an Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

2. Gowin, Enoch Burton, Wheatley, William Alonzo & Brewer, John M., Occupations, Ginn & Co., Boston, Mass., 1923.

3. Hill, Howard C., Vocational Civics, Ginn & Co., Boston, Mass., 1928.

4. Proctor, William Martin, Vocations, Houghton, Mifflin Co., New York, N. Y., 1934.

5. Filene, Catherine, Careers for Women, Houghton, Mifflin Co., New York, N. Y., 1934.

6. Davis, Frank and Davis, B. Carnall, Guidance for Youth, Ginn & Co., Boston, Mass., 1921.

more milk. Make a list of the conditions that will affect his income. (18) p. 221; (6) p. 52; (17) p. 2; (5) p. 26.

(88-10) From what kind of a dairy farm would you want your milk to come? Why? What kind of person would be most likely to succeed in dairy farming? Why? (6) p. 51; (5) p. 28; (17) p. 21.

(89-11) Be sure to read the book entitled "Grindstone Farm" by Lent. It will help you to understand the dairy farmer's work. The librarian will allow you to take it home over-night.

(89-12) Hand to your teacher a brief summary of the answers to the above questions.

(89-13) Choose an optional activity from the card file and plan to present your work to the class.

Reading References for Unit III

1. Zlegler, Samuel, and Jaquette, Helen. Choosing an Occupation. John C. Winston Co., Philadelphia, Pa., 1924.

2. Gowin, Enoch Burton, Wheatley, William Alonzo & Brewer, John M., Occupations. Ginn & Co., Boston, Mass., 1922.

3. Hill, Howard C., Vocational Civics. Ginn & Co., Boston, Mass., 1922.

4. Proctor, William Martin, Vocations. Houghton, Mifflin Co., New York, N. Y., 1924.

5. Filene, Catherine, Careers for Women. Houghton, Mifflin Co., New York, N. Y., 1924.

6. Davis, Frank and Davis, E. Carroll, Guidance for Youth. Ginn & Co., Boston, Mass., 1921.

7. Barnard, J. Lynn, Getting a Living, Franklin Publishing and Supply Co., 1921.

8. Edmonson, James B. and Dondineau, Arthur, Vocations Through Problems, Macmillan Co., New York, N. Y., 1937.

9. Platt, Rutherford, Book of Opportunities, G. Putnam & Sons, New York, N. Y., 1926.

10. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

11. Ernst, Clayton, What Shall I Be?, D. Appleton and Co., Boston, Mass., 1931.

12. Holbrook and Macgregor, Our World of Work, Allyn and Bacon, Boston, Mass., 1929.

13. Brewer, John M., Occupations, Ginn & Co., Boston, Mass., 1936.

14. Cottler, Joseph and Brecht, Harold, Careers Ahead, Lutte Broun Co., Boston, Mass., 1937.

15. Power, R. A. and Kilin, Vincent Earl, Handbook of Farming for Boys and Girls, E. M. Hale Co., Milwaukee, Wis., 1937.

16. Success Pamphlet, The Dairyman, Monograph, Vocational Information Series, Directed by Chloris Shade, Morgan-Dillon, Publishers, Chicago, Ill., 1937.

17. Career Monograph, Annual Husbandry, by Institute for Research, Chicago, Ill., 1931.

Note: In addition to these books you will find other references on general farming. The information will, in many cases, apply to the dairy farmer.

Optional Activities

1. Make a series of drawings illustrating the milk rules and regulations of the State.

2. Notice the advertisements of the various dairymen.

7. Barrard, J. Lynn. Getting a Living. Franklin Publishing and Supply Co., 1921.

8. Edmonson, James E. and Donohoe, Arthur. Vocations Through Problems. Macmillan Co., New York, N. Y., 1927.

9. Platt, Sutherford. Book of Opportunities. E. Pitman & Sons, New York, N. Y., 1928.

10. Lane, Mary Rogers. Vocations in Industry. Vol. I. International Textbook Co., Scranton, Pa., 1929.

11. Ernest, Clayton. What Shall I Be? D. Appleton and Co., Boston, Mass., 1931.

12. Holbrook and Macgregor. Our World of Work. Allyn and Bacon, Boston, Mass., 1929.

13. Brewer, John M. Occupations. Ginn & Co., Boston, Mass., 1926.

14. Cottler, Joseph and Brecht, Harold. Careers Ahead. Little Brown Co., Boston, Mass., 1937.

15. Power, R. A. and Kilth, Vincent Earl. Handbook of Farming for Boys and Girls. S. M. Hale Co., Milwaukee, Wis., 1937.

16. Success Pamphlet. The Dairyman. Monograph. Vocational Information Series, directed by Dilworth Shade. Morgan-Dillon, Publishers, Chicago, Ill., 1937.

17. Career Monograph. Annual Handbook. by Institute for Research, Chicago, Ill., 1931.

Note: In addition to these books you will find other references on general farming. The information will, in many cases, apply to the dairy farmer.

Optional Activities

1. Make a series of drawings illustrating the milk rules and regulations of the State.

2. Notice the advertisements of the various dairymen.

What points about the work do they stress?

3. Make a collection of articles on dairying from newspapers and magazines. Underline the most important facts with a red pencil.

4. Have you ever visited a dairy farm? Write an account of your visit.

5. Arrange an exhibit on dairy farming. Collect and mount pictures that help to tell the story of the dairyman. There are many books, too. Why not ask your own milk dealer for suggestions?

6. You have seen short plays which stress the importance of milk as a food. Why not try writing a play of this type?

7. A dairy farmer is having difficulty in getting a hired boy to suit him. Stage a series of interviews that will show (2) the type of boy the dairy farmer does not want; (b) the type of boy he will hire.

8. The farmer's boy has decided that he does not want to go to the Agricultural College. He says he can learn on the farm the way his father did. His father is exceedingly anxious to have his son study Dairying at college. What arguments might each use? Stage one of these talks.

9. During Milk Week the committee has secured a series of speakers to give radio talks. Imagine you are one of the speakers and prepare a 5-minute talk.

What points about the work do they stress?

3. Make a collection of articles on dairying from newspapers and magazines. Underline the most important facts with a red pencil.

4. Have you ever visited a dairy farm? Write an account of your visit.

5. Arrange an exhibit on dairy farming. Collect and mount pictures that help to tell the story of the dairyman. There are many books, too. Why not ask your own milk dealer for suggestions?

6. You have seen short plays which stress the importance of milk as a food. Why not try writing a play of this type?

7. A dairy farmer is having difficulty in getting a hired boy to suit him. Stage a series of interviews that will show (a) the type of boy the dairy farmer does not want; (b) the type of boy he will hire.

8. The farmer's boy has decided that he does not want to go to the Agricultural College. He says he can learn on the farm the way his father did. His father is exceedingly anxious to have his son study Dairying at college. What arguments might each use? Stage one of these talks.

9. During Milk Week the committee has secured a series of speakers to give radio talks. Imagine you are one of the speakers and prepare a 5-minute talk.

10. Compare a modern dairy farm with one of fifty years ago. What are some of the outstanding differences?

11. Make a series of drawings depicting a day's work on a dairy farm.

12. Write to the State Department of Agriculture for information on the Dairy Industry of this State.

13. Make a "Dairy Farm" notebook. Include your report on the dairy farmer, and clippings, and illustrations.

14. Dairy Co-operatives are very common. What is their purpose?

15. What is the purpose of the Babcock test? Talk to your science teacher about it and then prepare a simple report on the subject.

16. Who was Louis Pasteur? What did he have to do with the dairy business? Prepare an interesting report on "The Work of Louis Pasteur".

17. Ask your milk dealer where he gets the milk he sells and how it is shipped to him. Just what does he do with it? Your class will be interested in this report.

18. What could a 4-H Club do that would help boys and girls to know more about high grade dairy farming?

19. Have you ever heard of the Dairymen's League? What is its purpose?

20. Draw or plan a poster designed to increase the amount of milk people drink, and to educate the public on

10. Compare a modern dairy farm with one of fifty years ago. What are some of the outstanding differences?

11. Make a series of drawings depicting a day's work on a dairy farm.

12. Write to the State Department of Agriculture for information on the Dairy Industry of this State.

13. Make a "Dairy Farm" notebook. Include your report on the dairy farmer, and clippings, and illustrations.

14. Dairy Co-operatives are very common. What is their purpose?

15. What is the purpose of the Babcock test? Talk to your science teacher about it and then prepare a simple report on the subject.

16. Who was Louis Pasteur? What did he have to do with the dairy business? Prepare an interesting report on "The Work of Louis Pasteur".

17. Ask your milk dealer where he gets the milk he sells and how it is shipped to him. Just what does he do with it? Your class will be interested in this report.

18. What could a 4-H Club do that would help boys and girls to know more about high grade dairy farming?

19. Have you ever heard of the Dairymen's League? What is its purpose?

20. Draw or plan a poster designed to increase the amount of milk people drink, and to educate the public on

the value of milk.

21. Make up a slogan for the dairy farmer. Example: the Florist's slogan is "Say it with Flowers".

22. If you have a camera, take some pictures of dairy farming.

23. Plan a bulletin board exhibit of the pictures, posters, and articles contributed by the class. Notebooks may be included.

24. Have you ever read about a cattle judging contest? Look up the subject of judging dairy cows.

25. What common foods have milk or cream ingredients? What does this indicate? Put your information in poster form.

26. Draw a cartoon which indicates the work of the milk inspector as a safeguard to people.

27. Draw a cartoon indicating one disadvantage that faces a dairy farmer.

28. Do you think a dairy farmer needs to consider location as much as market gardener? Why or why not?

29. What is meant by the term "Tuberculin Tested" herd? Make a report on your findings.

30. Consult a State College catalogue. Make a list of the dairy courses.

31. Keep a list of the sources from which you have gained information, particularly library books, farm

the value of milk.

21. Make up a slogan for the dairy farmer. Example: the Florida's slogan is "Say it with Flowers".

22. If you have a camera, take some pictures of dairy farming.

23. Plan a bulletin board exhibit of the pictures, posters, and articles contributed by the class. Notebooks may be included.

24. Have you ever read about a cattle judging contest? Look up the subject of judging dairy cows.

25. What common foods have milk or cream ingredients? What does this indicate? Put your information in poster form.

26. Draw a cartoon which indicates the work of the milk inspector as a safeguard to people.

27. Draw a cartoon indicating one disadvantage that faces a dairy farmer.

28. Do you think a dairy farmer needs to consider location as much as market gardener? Why or why not?

29. What is meant by the term "Tuberculin Tested" herd? Make a report on your findings.

30. Consult a State College catalogue. Make a list of the dairy courses.

31. Keep a list of the sources from which you have gained information, particularly library books, farm

magazines and special bulletins. Give this list to your teacher for use with another class. A note about what each contains and the most important pages will help.

32. Do you know an insurance salesman? If so, ask him about the various kinds of insurance offered to farmers. Perhaps you could get some information from the library.

33. Did you ever hear a person say "Isn't that a fine herd of Holsteins?" What is a Holstein? What other names are used to designate dairy herds? What is a pure-bred? The library will probably have some pictures for you. Why not make an exhibit with explanations?

34. Dairy equipment is expensive. Make a list of the equipment a beginning dairy farmer would need.

35. Mr. Jones had a modern dairy farm. He has been urged to open an ice cream booth or store on his land. He says he must think it over. What must be considered before beginning such a venture?

Class Presentation Period

1. This period will be given over to floor talks, special reports and exhibits.

2. A selection of pictures, original drawings, and cartoons may be made, and used with the projector, will furnish a splendid review of important facts and concepts. If a committee, with the guidance of the teacher, selects the pictures and talks, it will be all the more valuable.

magazines and special bulletins. Give this list to your teacher for use with another class. A note about what each contains and the most important pages will help.

32. Do you know an insurance salesman? If so, ask him about the various kinds of insurance offered to farmers. Perhaps you could get some information from the library.

33. Did you ever hear a person say "Isn't that a fine herd of Holsteins?" What is a Holstein? What other names are used to designate dairy breds? What is a pure-bred? The library will probably have some pictures for you. Why not make an exhibit with explanations?

34. Dairy equipment is expensive. Make a list of the equipment a beginning dairy farmer would need.

35. Mr. Jones had a modern dairy farm. He has been urged to open an ice cream booth or store on his farm. He says he must think it over. What must be considered before beginning such a venture?

Class Presentation Period

1. This period will be given over to floor talks, special reports and exhibits.

2. A selection of pictures, original drawings, and cartoons may be made, and used with the projector, will furnish a splendid review of important facts and concepts. If a committee, with the guidance of the teacher, selects the pictures and talks, it will be all the more valuable.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The dairyman who wishes to make the most of his farm 1.....

a) does dairy work only.
b) raises at least some of the fodder for his herd.
c) uses all available land for pasture.
d) buys commercial fodder only.

*The milk production of the dairy cow 2.....

a) has always been as great as at present.
b) has been greater in past years.
c) has recently increased tremendously since principles of breeding have been understood.
d) is of little importance in dairy work.

Milk is usually tested by the inspector to find out 3.....

a) the percent of sugar in the milk.
b) the presence of butter fat.
c) the amount of minerals in the milk.
d) the kind of vitamins in the milk.

One great disadvantage of dairy farming is 4.....

a) the keen competition.
b) the strict rules set up by the State.
c) the chance of loss of stock through disease, particularly tuberculosis.
d) the large number of people engaged in dairy farming.

The dairy farmer keeps careful daily milk records primarily 5.....

a) to advertise.
b) to show State inspectors.
c) to find out which of his herd are profitable and which are not profitable.
d) to help decide the price of milk.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The dairyman who wishes to make the most of his farm 1

a) does dairy work only.
b) raises at least some of the fodder for his herd.
c) uses all available land for pasture.
d) buys commercial fodder only.

The milk production of the dairy cow 2

a) has always been as great as at present.
b) was been greater in past years.
c) has recently increased tremendously since principles of breeding have been understood.
d) is of little importance in dairy work.

Milk is usually tested by the inspector to find out 3

a) the percent of sugar in the milk.
b) the presence of butter fat.
c) the amount of minerals in the milk.
d) the kind of vitamins in the milk.

One great disadvantage of dairy farming is 4

a) the keen competition.
b) the strict rules set up by the State.
c) the chance of loss of stock through diseases, particularly tuberculosis.
d) the large number of people engaged in dairy farming.

The dairy farmer keeps careful daily milk records primarily 5

a) to advertise.
b) to show State inspectors.
c) to find out which of his herd are profitable and which are not profitable.
d) to help decide the price of milk.

Grade A dairy farms 6.....

a) must maintain a higher standard than the average farm.
b) has same standards as regular farms.
c) are excused from State regulations.
d) are not encouraged by the State.

In winter the wise dairyman 7.....

a) does not expect much milk from his cows.
b) keeps the barns as near summer temperature as possible to insure maximum production of milk.
c) expects no difference in milk produced regardless of temperature or weather conditions.
d) finds it too difficult to try to regulate the temperature.

A leading type of agriculture in Rhode Island is 8.....

a) cotton raising.
b) raising wheat.
c) raising pigs and sheep.
d) dairying.

Two of the most important high school studies for a boy who is interested in becoming a dairy farmer are 9.....

a) English and drawing.
b) social studies and journalism.
c) science and business training.
d) literature and spelling.

The wise dairyman 10.....

a) spends some of his time reading helpful books and articles.
b) spends no time in study.
c) does the best he can without study.
d) would like to read and study but never finds time to do so.

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the

The dairy farmer provides food that is

highly (1). 1.....

*Dairying furnishes about (2) of the 2.....

total farm income in America.

He must (3) his stock carefully if he 3.....

wishes to maintain a high standard of production.

The modern dairy barn should be (4), 4.....

(5) arranged, and (6) to keep clean. 5.....

The sanitary dairyman puts on a (7) 6.....

suit and cap before milking. 7.....

The dairy farmer's work is (8) with 8.....

plenty of out-door exercise.

*The many problems which face the dairy 9.....

farmer (9) him to adopt (10) methods. 10.....

The dairy farmer is more (11) than many 11.....

city workers. He is also able to supply his

(12) with those products that are very rich 12.....

in (13) value. 13.....

1. one-fourth	8. select	15. varied
2. challenge	9. beautifully	16. lacking
3. sell	10. three-fourths	17. dark
4. nutritious	11. family	18. independent
5. white	12. easy	19. well-lighted
6. food	13. discourage	20. monotonous
7. conveniently	14. scientific	21. difficult

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the

The dairy farmer provides food that is

nigh ly (1). 1.....

Dairying furnishes about (2) of the 2.....

total farm income in America.

He must (3) his stock carefully if he 3.....

wishes to maintain a high standard of production.

The modern dairy barn should be (4). 4.....

(5) arranged, and (6) to keep clean. 5.....

The sanitary dairyman puts on a (7) 6.....

suit and cap before milking. 7.....

The dairy farmer's work is (8) with 8.....

plenty of out-door exercise.

The many problems which face the dairy 9.....

farmer (9) him to adopt (10) methods. 10.....

The dairy farmer is more (11) than many 11.....

city workers. He is also able to supply his

(12) with those products that are very rich 12.....

in (13) value. 13.....

1. one-fourth	8. select	15. varied
2. challenge	9. beautifully	16. looking
3. sell	10. three-fourths	17. dark
4. nutritious	11. family	18. independent
5. white	12. easy	19. well-lighted
6. food	13. discourage	20. monotonous
7. conveniently	14. scientific	21. difficult

The dairy laws of our State must be rigidly enforced to (14) the health of the people. 14.....

If you wished information concerning dairy farming, you could write to the (15). 15.....

To succeed, both the market gardener and the dairy farmer should be located rather near the (16). 16.....

Covered pails help to insure (17) milk. 17.....

All milking utensils should be (18) after using. 18.....

Enough (19) land must be provided for the cows. 19.....

The income of a dairy farmer will partly depend upon the (20) of his stock. 20.....

Milk must be (21) immediately after milking. 21.....

The farmer stores the winter feed for his cattle in the (22). 22.....

1. sterilized
2. protect
3. cultivated
4. pasture
5. detect
6. used
7. Department of Agriculture
8. silo
9. quality
10. clean
11. market
12. color
13. city
14. backwoods
15. cooled
16. rich
17. bottled
18. rural school

The dairy laws of our State must be

rigidly enforced to _____ (14) the health of the 14

people.

If you wished information concerning

dairy farming, you could write to the _____ (15). 15

To succeed, both the market gardener

and the dairy farmer should be located rather

near the _____ (16). 16

Covered pails help to insure _____ (17) 17

milk.

All milking utensils should be _____ (18) 18

after using.

Enough _____ (19) land must be provided for 19

the cows.

The income of a dairy farmer will

partly depend upon the _____ (20) of his stock. 20

Milk must be _____ (21) immediately after 21

milking.

The farmer stores the winter feed for

his cattle in the _____ (22). 22

1. sterilized	7. Department of Agriculture	13. city
2. protect	8. milk	14. backwoods
3. cultivated	9. quality	15. cooled
4. pasture	10. clean	16. rich
5. detect	11. market	17. bottled
6. used	12. color	18. rural school

The dairy farmer must be ready at any 23.....
time to have his (23), (24) milk house, 24.....
and (25) inspected. 25.....

Delay in marketing his products will
mean (26) to the farmer. 26.....

The dairy farmer is particularly im-
portant to the (27) of the community. 27.....

It is a (28) occupation as may be 28.....
seen by the increasing number of workers.

One of the most important requirements
in dairying is (29). 29.....

The dairy farmer must keep accurate
record of tests, (30) produced, and food 30.....
consumed.

The dairy farmer must have the ability
to (31) stock if he is to improve and in- 31.....
crease his herd.

The standards of the dairy industry
are set up by the (32). 32.....

The dairy farmer must use (33) 33.....
methods.

1. growing
2. record
3. loss
4. health
5. cows
6. house
7. cleanliness
8. scientific
9. farmer
10. judge
11. milk
12. land
13. State
14. gain
15. barns
16. milk
17. limited

The dairy farmer must be ready at any 23.....
time to have his (23). (24) milk house, 24.....
and (25) inspected. 25.....

Delay in marketing his products will
mean (26) to the farmer. 26.....

The dairy farmer is particularly important to the (27) of the community. 27.....

It is a (28) occupation as may be 28.....
seen by the increasing number of workers.

One of the most important requirements
in dairying is (29). 29.....

The dairy farmer must keep accurate
record of tests, (30) produced, and food 30.....
consumed.

The dairy farmer must have the ability
to (31) stock if he is to improve and in- 31.....
crease his herd.

The standards of the dairy industry
are set up by the (32). 32.....

The dairy farmer must use (33) 33.....
methods.

1. growing	7. cleanliness	13. State
2. record	8. scientific	14. Gain
3. loss	9. farmer	15. barns
4. health	10. judge	16. milk
5. cows	11. milk	17. limited
6. horse	12. land	

*Many (34) Associations have been 34.....
organized in the dairy business.

Cows must be milked (35) every day 35.....
in the week.

The dairy farmer must (36) much capital 36.....
in his equipment and herd.

The best preparation is a (37) year 37.....
course in an (38) college. 38.....

The income of the dairy farmer will depend in part upon the (39) of the farm. 39.....

There are so many tasks to be done that 40.....
a successful dairy farmer must be (40) to
succeed.

One requirement is a genuine (41) for 41.....
animals.

Only those who are willing to (42) hard 42.....
and (43) should enter this occupation. 43.....

The dairy farmer needs (44) ability. 44.....

The dairy farmer should build a (45) 45.....
for honesty, and (46).

1. four
2. barn
3. reputation
4. Cooperative
5. carelessness
6. dislike
7. work
8. location
9. cleanliness
10. invest
11. speak
12. liking
13. ordinary
14. agricultural
15. regularly
16. long
17. two
18. systematic
19. lose
20. always tired
21. business

Many (34) Associations have been 34.....
organized in the dairy business.

Cows must be milked (35) every day 35.....
in the week.

The dairy farmer must (36) much capital 36.....
in his equipment and herd.

The best preparation is a (37) year 37.....
course in an (38) college. 38.....

The income of the dairy farmer will de-
pend in part upon the (39) of the farm. 39.....

There are so many tasks to be done that 40.....
a successful dairy farmer must be (40) to
succeed.

One requirement is a genuine (41) for 41.....
animals.

Only those who are willing to (42) hard 42.....
and (43) should enter this occupation. 43.....

The dairy farmer needs (44) ability. 44.....

The dairy farmer should build a (45) 45.....
for honesty, and (46).

1. four	8. location	15. regularly
2. barn	9. cleanliness	16. long
3. reputation	10. invest	17. two
4. Cooperative	11. speak	18. systematic
5. carelessness	12. living	19. lose
6. dislike	13. ordinary	20. always tired
7. work	14. agricultural	21. business

CHAPTER V

THE POULTRY FARMER

The Unit

The poultry farmer supplies an ever increasing demand for strictly fresh eggs and high grade poultry meat. Poultry raising was once considered an incidental farm chore which provided a bit of extra money. With the application of scientific principles in breeding and care of the flock, and the modern means of transporting, preserving and marketing these products, poultry raising has become increasingly important as a specialized type of agriculture. Since the work does not require too great physical strength, many women have entered this field. Careful direction of the many details of both production and marketing is necessary in order to win success. A poultry farm, conducted according to the findings of scientific research in this field, will yield a fair income and the satisfaction of giving valueable service.

The Delimitation

<u>Service to Others</u>

1. The poultry farmer furnishes us with eggs and poultry meat. These products are rich in food value.

CHAPTER V

THE POULTRY FARMER

The Unit

The poultry farmer supplies an ever increasing demand for strictly fresh eggs and high grade poultry meat. Poultry raising was once considered an incidental farm chore which provided a bit of extra money. With the application of scientific principles in breeding and care of the flock, and the modern means of transporting, preserving and marketing these products, poultry raising has become increasingly important as a specialized type of agriculture. Since the work does not require too great physical strength, many women have entered this field. Careful direction of the many details of both production and marketing is necessary in order to win success. A poultry farm, conducted according to the findings of scientific research in this field, will yield a fair income and the satisfaction of giving valuable service.

The Delimitation

Service to Others

1. The poultry farmer furnishes us with eggs and poultry meat. These products are rich in food value.

2. Figures show that poultry raising has increased more than 20% in Rhode Island in recent years. It is a growing occupation.

3. Poultry products make possible many of our most delicious dishes. These products are also important as the basis of special diets for the convalescent.

Required Tasks

*1. One of the most important duties of the poultry raiser is to select good stock. Only by so doing can he hope to maintain high standards.

2. The location of the farm is most favorable when near a large town or city. This gives him a nearby market for his products.

3. As time goes on the poultry farmer must cull his flock, getting rid of any poor stock.

*4. If he is undertaking the work of breeding, he must know and apply the most scientific principles in the care of the breeding flock.

5. Good, nourishing poultry food must be provided for, in large measure, this will spell success or failure.

6. The poultry raiser must arrange for sufficient forage acreage for his flock. There must also be plenty of clean water available for the hens and chickens. The water must be protected in winter so that it will not freeze.

7. The young chicks must be given special care, both in

2. Figures show that poultry raising has increased more than 20% in Rhode Island in recent years. It is a growing occupation.

3. Poultry products make possible many of our most delicious dishes. These products are also important as the basis of special diets for the convalescent.

Required Traits

1. One of the most important duties of the poultry raiser is to select good stock. Only by so doing can he hope to maintain high standards.

2. The location of the farm is most favorable when near a large town or city. This gives him a nearby market for his products.

3. As time goes on the poultry farmer must cull his flock, getting rid of any poor stock.

4. If he is undertaking the work of breeding, he must know and apply the most scientific principles in the care of the breeding flock.

5. Good, nourishing poultry food must be provided for. In large measure, this will spell success or failure.

6. The poultry raiser must arrange for sufficient forage acreage for his flock. There must also be plenty of clean water available for the hens and chickens. The water must be protected in winter so that it will not freeze.

7. The young chicks must be given special care, both in

feeding and shelter. Brooder houses are needed for very young chicks to keep them warm.

8. The poultry raiser must keep the flock and houses free from insects. Systematic cleaning of the poultry houses to remove all kinds of dust and dirt is necessary to maintain a healthy flock. The walls of the poultry house should be disinfected and whitewashed. The poultry raiser must provide clean nests for laying.

9. The poultry farmer must keep all houses, feeders, and water equipment in good repair. Care must be taken to make houses secure against animal pests and thieves.

10. In planning for poultry houses he must provide sufficient space for birds to eliminate crowding. The houses should be so constructed that there is plenty of light and ventilation.

11. A knowledge of the scientific care necessary to regulate an incubator is needed by the poultry raiser.

12. Sick and diseased birds should be separated from the flock and be given special care.

13. The poultry farmer gathers, candles, weighs, grades, and packs the eggs very carefully. Poorly packed eggs mean great loss. The farmer may fatten and prepare broilers for market. Some farmers specialize in raising and selling young chicks.

14. The farmer may sell directly to the customers or a

feeding and shelter. Brooder houses are needed for very young chicks to keep them warm.

8. The poultry raiser must keep the flock and houses free from insects. Systematic cleaning of the poultry houses to remove all kinds of dust and dirt is necessary to maintain a healthy flock. The walls of the poultry house should be disinfected and whitewashed. The poultry raiser must provide clean nests for laying.

9. The poultry farmer must keep all houses, feeders, and water equipment in good repair. Care must be taken to make houses secure against animal pests and thieves.

10. In planning for poultry houses he must provide sufficient space for birds to eliminate crowding. The houses should be so constructed that there is plenty of light and ventilation.

11. A knowledge of the scientific care necessary to regulate an incubator is needed by the poultry raiser.

12. Sick and diseased birds should be separated from the flock and be given special care.

13. The poultry farmer gathers, candles, weighs, grades, and packs the eggs very carefully. Poorly packed eggs mean great loss. The farmer may fatten and prepare broilers for market. Some farmers specialize in raising and selling young chicks.

14. The farmer may sell directly to the customers or a

wholesale dealer. He may market his products through contracts with commission men. In many places, he may join a Co-operative.

15. The poultry farmer must keep accurate accounts. Every cost item should be recorded, as well as income. Only so can he know whether or not his business is profitable.

16. Many economical poultry farmers raise a part of the feed on the farm. This is a saving because grain and other feeds are expensive.

Advantages and Disadvantages

1. There is a steady market for high-grade poultry products.

2. Since the work is carried on both summer and winter, there is a steady income throughout the year. On a scientifically-managed farm, this income is usually good.

3. The work is not too heavy. For this reason, many women have entered the field as managers of poultry farms.

4. Much of the work is out of doors, and provides plenty of exercise. To one who enjoys working with living things, raising chicks is interesting. *There is always an opportunity to improve the farm, increase production through scientific management, and raise the sales record.

*5. The initial investment need not be large, for it is possible to begin this work on a small scale.

6. The poultry raiser is able to supply his own table

wholesale dealer. He may market his products through contracts with commission men. In many places, he may join a Co-operative.

15. The poultry farmer must keep accurate accounts. Every cost item should be recorded, as well as income. Only so can he know whether or not his business is profitable.

16. Many economical poultry farmers raise a part of the feed on the farm. This is a saving because grain and other feeds are expensive.

Advantages and Disadvantages

1. There is a steady market for high-grade poultry products.

2. Since the work is carried on both summer and winter, there is a steady income throughout the year. On a scientifically-managed farm, this income is usually good.

3. The work is not too heavy. For this reason, many women have entered the field as managers of poultry farms.

4. Much of the work is out of doors, and provides plenty of exercise. To one who enjoys working with living things, raising chicks is interesting. There is always an opportunity to improve the farm, increase production through scientific management, and raise the sales record.

5. The initial investment need not be large. For it is possible to begin this work on a small scale.

6. The poultry raiser is able to supply his own table

with an abundance of nutritious products.

7. The poultry raiser may feel that he is serving the community by providing healthful foods that are conveniently and safely packed. Poultry products must meet the requirements of State laws.

8. Nevertheless, there is a chance for loss through dirt, cracked shells, and delayed marketing.

9. Prices do not remain high. The low-price season brings less income. In addition, there is growing competition among poultry farmers.

10. There are many unpleasant tasks to be performed in this work.

11. The work must be carried on both day and night, particularly during the hatching season. The poultry must be cared for every day of the week.

12. High grain and feed prices mean less income.

13. There is a chance for loss through disease, animal pests, or accidents.

*14. Unless careful record is kept, and the flock culled periodically, the farmer may find that some of his birds yield little or no profit.

Training

1. This work may be learned by helping on a farm. Boys and girls often get some experience through caring for a backyard poultry business.

with an abundance of nutritious products.

7. The poultry raiser may feel that he is serving the community by providing healthful foods that are conveniently and safely packed. Poultry products must meet the requirements of State laws.

8. Nevertheless, there is a chance for loss through dirt, cracked shells, and delayed marketing.

9. Prices do not remain high. The low-price season brings less income. In addition, there is growing competition among poultry farmers.

10. There are many unpleasant tasks to be performed in this work.

11. The work must be carried on both day and night, particularly during the hatching season. The poultry must be cared for every day of the week.

12. High grain and feed prices mean less income.

13. There is a chance for loss through diseases, animal pests, or accidents.

14. Unless careful record is kept, and the flock culled periodically, the farmer may find that some of his birds yield little or no profit.

Training

1. This work may be learned by helping on a farm. Boys and girls often get some experience through caring for a backyard poultry business.

2. An agricultural college offers scientific training in production, marketing, and poultry farm management.

3. A farmer may begin this work on a small scale, and as he enlarges the farm, he will profit by his experiences.

4. The United States Department of Agriculture will furnish much material for information and study. Various poultry associations also send out valuable reports. Farm magazines and books should be studied for the latest methods in poultry raising.

Financial Returns

The amount of profit in poultry raising depends largely upon such factors as: (a) the size of the flock; (b) the quality of the flock; (c) the type of products sold; (d) the equipment; (e) nearness to market.

Abilities Needed

1. The successful farmer must be systematic in his work.

2. The poultry farmer needs business ability to carry on a prosperous enterprise. Salesmanship is an asset in this work.

3. There is always a chance for loss. The farmer needs patience and perseverance to face such loss and to try again.

4. Honesty in pricing and quality of products will win him a reputation that means success. Carelessness in these respects will bring failure.

2. An agricultural college offers scientific training in production, marketing, and poultry farm management.

3. A farmer may begin this work on a small scale, and as he enlarges the farm, he will profit by his experiences.

4. The United States Department of Agriculture will furnish much material for information and study. Various poultry associations also send out valuable reports. Farm magazines and books should be studied for the latest methods in poultry raising.

Financial Returns

The amount of profit in poultry raising depends largely upon such factors as: (a) the size of the flock; (b) the quality of the flock; (c) the type of products sold; (d) the equipment; (e) nearness to market.

Abilities Needed

1. The successful farmer must be systematic in his work.

2. The poultry farmer needs business ability to carry on a prosperous enterprise. Salesmanship is an asset in this work.

3. There is always a chance for loss. The farmer needs patience and perseverance to face such loss and to try again.

4. Honesty in pricing and quality of products will win him a reputation that means success. Carelessness in these respects will bring failure.

5. Only the farmer who is energetic and willing to work should attempt this work. There are no limits to the hours and tasks in the poultry business.

6. The worker must be truly interested or the disagreeable tasks and losses will make the farmer dissatisfied.

7. A careful watch over the flock must be maintained, and preventive methods used against disease, low production, and loss. For this reason, the poultry farmer must be able to give attention to many tasks at the same time. This requires good management.

8. Cleanliness on the poultry farm will eventually mean bigger profits.

*9. New developments in poultry farms demand a willingness to learn and an interest in experimenting to determine the most satisfactory way to do the work.

10. Knowledge of State regulations concerning the sale of eggs and poultry must be acquired. The State Department of Agriculture will furnish such information.

Incidental Learning Products

1. An understanding of the increasing importance of the poultry worker in providing healthful and palatable foods.

2. An appreciation of the mental and physical energy which is required of a successful poultry farmer in managing the many details of such an enterprise.

5. Only the farmer who is energetic and willing to work should attempt this work. There are no limits to the hours and tasks in the poultry business.

6. The worker must be truly interested or the disagreeable tasks and losses will make the farmer dissatisfied.

7. A careful watch over the flock must be maintained, and preventive methods used against diseases, low production, and loss. For this reason, the poultry farmer must be able to give attention to many tasks at the same time. This requires good management.

8. Cleanliness on the poultry farm will eventually mean bigger profits.

9. New developments in poultry farms demand a willingness to learn and an interest in experimenting to determine the most satisfactory way to do the work.

10. Knowledge of State regulations concerning the sale of eggs and poultry must be acquired. The State Department of Agriculture will furnish such information.

Incidental Learning Products

1. An understanding of the increasing importance of the poultry worker in providing healthful and palatable foods.

2. An appreciation of the mental and physical energy which is required of a successful poultry farmer in managing the many details of such an enterprise.

Unit Assignment

(Approximate Time Allotment - six to eight periods)

Group Introductory Period

This unit assignment is planned for group work. The business of backyard poultry raising is familiar to many children. Much information can be gained through interviewing a friend or neighbor. A number of poultry journals and posters will prove valuable.

(SG-1) You will find it interesting to organize as a committee. The chairman should conduct discussions and make assignments. The secretary should take notes on discussions and keep a record of assignments. Every one must cooperate if success is to be assured.

(SG-2) Each member of the group should find an opportunity to interview a man or woman who is raising or caring for poultry. Find out why such a person is doing this work and what some of the daily chores include.

(SG-3) Use a part of the period to talk over the result of your interview. You should find that you have gathered quite a bit of information during the period.

Individual Work Period

Service to Others

(SG-4) Why is the poultry raiser needed today?

(1) Part III, p. 6; (5) p. 247; (6) p. 5; (7) p. 56.

(SG-5) Mention some of the foods you enjoy that make

Unit Assignment

(Approximate Time Allotment - six to eight periods)

Group Introductory Period

This unit assignment is planned for group work. The business of backyard poultry raising is familiar to many children. Much information can be gained through interviewing a friend or neighbor. A number of poultry journals and posters will prove valuable.

(SG-1) You will find it interesting to organize as a committee. The chairman should conduct discussions and make assignments. The secretary should take notes on discussions and keep a record of assignments. Every one must cooperate if success is to be assured.

(SG-2) Each member of the group should find an opportunity to interview a man or woman who is raising or caring for poultry. Find out <u>why</u> such a person is doing this work and what some of the daily chores include.

(SG-3) Use a part of the period to talk over the results of your interview. You should find that you have gathered quite a bit of information during the period.

Individual Work Period

Service to Others

(SG-4) Why is the poultry raiser needed today?

(1) Part III, p. 6; (5) p. 24; (6) p. 5; (7) p. 56.

(SG-5) Mention some of the foods you enjoy that make

use of poultry products.

(*SG-6) The poultry business is increasing annually. What reasons can you give for this increase? (8) p. 54.

Required Tasks

(SG-7) What are some of the daily routine duties that a poultry raiser must do? (1) pp. 35-48; (7) pp. 56-57; (3) pp. 75-76; p. 84; (5) p. 247; (8) p. 52; (6) pp. 7-8; (9) p. 37.

(SG-8) At certain seasons the work requires constant attention. How does the poultry raiser care for the incubator? The baby chicks? (1) pp. 12-21; pp. 22-27 (Part III); (8) p. 53.

(SG-9) What must be done to maintain a healthy, well sheltered flock? Be sure to consider houses, feed, watering, and forage area, as well as care of the flock. (1) pp. 30-35 Part III pp. 27-33; pp. 36-41; (6) pp. 7-8; (7) p. 57.

(SG-10) What must the poultry farmer do before marketing his eggs? poultry?

(*SG-11) Look up the Rhode Island Poultry and Egg Laws. List the important considerations. (State bulletin)

(*SG-12) How does the poultry farmer find out which hens are the best layers and which yield little profit? What does "culling the flock" mean? (1) pp. 30-35.

(*SG-13) In what different ways may a poultry farmer market his products? (1) Part III, pp. 34-35.

use of poultry products.

(*SG-6) The poultry business is increasing annually. What reasons can you give for this increase? (2) p. 54.

Required Tasks

(SG-7) What are some of the daily routine duties that a poultry raiser must do? (1) pp. 35-48; (7) pp. 56-57; (3) pp. 75-76; p. 84; (5) p. 247; (6) p. 52; (8) pp. 7-8; (9) p. 37.

(SG-8) At certain seasons the work requires constant attention. How does the poultry raiser care for the incubator? The baby chicks? (1) pp. 12-21; pp. 22-27 (part III); (8) p. 33.

(SG-9) What must be done to maintain a healthy, well sheltered flock? Be sure to consider houses, feed, watering, and range area, as well as care of the flock. (1) pp. 30-35 part III pp. 27-33; pp. 36-41; (6) pp. 7-8; (7) p. 37.

(SG-10) What must the poultry farmer do before marketing his eggs? poultry?

(*SG-11) Look up the Rhode Island Poultry and Egg Laws. List the important considerations. (State bulletin)

(*SG-12) How does the poultry farmer find out which hens are the best layers and which yield little profit? What does "culling the flock" mean? (1) pp. 30-33.

(*SG-13) In what different ways may a poultry farmer market his products? (1) Part III, pp. 34-35.

(*SG-14) What items will be included in a poultry farmer's daily account book? Explain.

Advantages and Disadvantages

(SG-15) What advantages do the poultry farmer and market gardener have in common? the poultry farmer and the dairy farmer? (1) Part III, pp. 8-9; (7) p. 56; (8) pp. 54-55; (9) pp. 38-40; (6) pp. 14-15.

(SG-16) What disadvantages do the following suggest? (a) change in prices; (b) disagreeable chores; (c) the cost of poultry feed; (d) chances for loss; (e) non-profit birds. Explain. (8) p. 55; (3) pp. 79-80; (7) p. 57; (9) p. 40; (6) p. 15.

Training

(SG-17) List the various ways in which a boy or girl may learn the poultry business. (9) p. 37; (8) p. 54; (6) p. 21.

Financial Returns

(SG-18) Not all poultry farmers make the same income. Upon what will it depend? (9) p. 39; (6) p. 20.

(*SG-19) Compare these factors with those we mentioned in the study of the dairy farmer.

Abilities Needed

(SG-20) Describe the kind of a man that would succeed as a poultry farmer. (8) p. 54; (9) p. 39; (6) p. 19.

When you have completed the required work, write a

(*SG-14) What items will be included in a poultry farmer's daily account book? Explain.

Advantages and Disadvantages

(SG-15) What advantages do the poultry farmer and market gardener have in common? the poultry farmer and the dairy farmer? (1) Part III, pp. 8-9; (7) p. 56; (8) pp. 54-55; (9) pp. 38-40; (6) pp. 14-15.

(SG-16) What disadvantages do the following suggest? (a) change in prices; (b) disagreeable chores; (c) the cost of poultry feed; (d) chances for loss; (e) non-profit birds. Explain. (8) p. 55; (3) pp. 79-80; (7) p. 57; (9) p. 40; (6) p. 15.

Training

(SG-17) List the various ways in which a boy or girl may learn the poultry business. (9) p. 37; (8) p. 54; (6) p. 21.

Financial Returns

(SG-18) Not all poultry farmers make the same income. Upon what will it depend? (9) p. 39; (6) p. 20.

(*SG-19) Compare these factors with those we mentioned in the study of the dairy farmer.

Abilities Needed

(SG-20) Describe the kind of a man that would succeed as a poultry farmer. (8) p. 54; (9) p. 39; (6) p. 18.

When you have completed the required work, write a

summary and hand it to your teacher. Then choose any of the optional activities from the card file that you wish.

References

1. Power, R. A. and Kirlin, Earl Vincent, Handbook of Farming for Boys and Girls, E. M. Hale Co., Milwaukee, Wis., 1937.

2. Edmonson, James B. and Dondineau, Arthur, Vocations Through Problems, The MacMillan Co., New York, N. Y., 1937.

3. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

4. Zeigler, Samuel H. and Jacquette, Helen, Choosing An Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

5. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

6. Career Monograph, No. 22, Animal Husbandry as a Career, The Institute for Research, Chicago, Ill., 1931.

7. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

8. Davis, Frank G. and Davis, B. Carnall, Guidance for Youth, Ginn and Co., Boston, Mass., 1928.

9. Filene, Catherine, Careers for Women, Houghton Mifflin Co., New York, N. Y., 1934.

Note: Many books not listed on this page discuss general farming. Many of the facts concerning general farming will also apply to poultry raising. Special booklets, magazines, and advertising material will also help you. Be sure to note the names of these sources from which you gain facts. You may consult the supplementary list for suggestions.

summary and hand it to your teacher. Then choose any of the optional activities from the card file that you wish.

References

1. Power, E. A. and Aldrin, Earl Vincent. Handbook of Training for Boys and Girls. E. M. Hale Co., Milwaukee, Wis., 1927.

2. Edmonson, James B. and Donahoe, Arthur. Vocational Training Problems. The MacMillan Co., New York, N. Y., 1927.

3. Lane, Mary Rogers. Vocations in Industry, Vol. I. International Textbook Co., Scranton, Pa., 1929.

4. Zeigler, Samuel R. and Jacquette, Helen. Choosing An Occupation. John C. Winston Co., Philadelphia, Pa., 1924.

5. Crewer, John M., Occupations. Ginn and Co., Boston, Mass., 1926.

6. Career Monograph, No. 26. Animal Husbandry as a Career. The Institute for Research, Chicago, Ill., 1931.

7. Proctor, William Martin. Vocations. Houghton Mifflin Co., New York, N. Y., 1928.

8. Davis, Frank G. and Davis, G. Carroll. Guidance for Youth. Ginn and Co., Boston, Mass., 1928.

9. Milne, Catherine. Careers for Women. Houghton Mifflin Co., New York, N. Y., 1934.

Note: Many books not listed on this page discuss general farming. Many of the facts concerning general farming will also apply to poultry raising. Special booklets, magazines, and advertising material will also help you. Be sure to note the names of these sources from which you gain facts. You may consult the supplementary list for suggestions.

Optional Activities

1. Write a diary of the manager of a poultry farm for a certain month.

2. You have been invited to speak to the local 4-H Club on the "Duties of a Modern Poultry Farmer". Plan your talk.

3. Prepare an article for a local newspaper entitled "How Science has Aided the Poultry Farmer".

4. Plan a poster advertising a poultry show. You will want to make it attractive, give necessary information, and make people want to come.

5. Draw a series of cartoons depicting some of the disadvantages of poultry work.

6. Make a poultry exhibit. You can make a model of a modern poultry house very easily. Pictures, objects, magazines, and a poultry notebook will make the display attractive.

7. Have you ever seen a sign "Baby Chicks"? What does it mean?

8. Write to the State Department of Agriculture for information concerning poultry raising in Rhode Island. Write to the United States Department of Agriculture for bulletins on this subject.

9. Dramatize a poultry farm manager hiring a boy to

Optional Activities

1. Write a diary of the manager of a poultry farm for a certain month.

2. You have been invited to speak to the local 4-H club on the "Duties of a Modern Poultry Farmer". Plan your talk.

3. Prepare an article for a local newspaper entitled "How Science has Aided the Poultry Farmer".

4. Plan a poster advertising a poultry show. You will want to make it attractive, give necessary information, and make people want to come.

5. Draw a series of cartoons depicting some of the disadvantages of poultry work.

6. Make a poultry exhibit. You can make a model of a modern poultry house very easily. Pictures, objects, magazines, and a poultry notebook will make the display attractive.

7. Have you ever seen a sign "Baby Chicks"? What does it mean?

8. Write to the State Department of Agriculture for information concerning poultry raising in Rhode Island. Write to the United States Department of Agriculture for bulletins on this subject.

9. Dramatize a poultry farm manager hiring a boy to

help on the farm. He is outlining the duties and responsibilities.

10. Make a series of drawings showing the regular tasks of this worker.

11. Look up the various breeds of poultry. What advantages does each claim?

12. Bring to class a number of poultry journals. Select a few important pointers you gained from the reading.

13. Write a story of a visit to a poultry farm.

14. Dramatize a farmer and his son discussing college work in poultry raising. The father becomes convinced that a college education is practical and worthwhile. Look up poultry courses in the State College catalogue.

15. Prepare a series of questions and answers. The group may present this exercise to the class.

Class Presentation Period

1. The group members share in presenting the story of the poultry raiser. Discussion and questions will clarify the information.

2. The presentation of optional activities by members of the group will be of helpful interest.

Testing

Only those who belong to the group should take the test.

help on the farm. He is outlining the duties and responsibilities.

10. Make a series of drawings showing the regular tasks of this worker.

11. Look up the various breeds of poultry. What advantages does each claim?

12. Bring to class a number of poultry journals. Select a few important pointers you gained from the reading.

13. Write a story of a visit to a poultry farm.

14. Dramatize a farmer and his son discussing college work in poultry raising. The father becomes convinced that a college education is practical and worthwhile. Look up poultry courses in the State College catalogue.

15. Prepare a series of questions and answers. The group may present this exercise to the class.

Class Presentation Period

1. The group members share in presenting the story of the poultry raiser. Discussion and questions will clarify the information.

2. The presentation of optional activities by members of the group will be of helpful interest.

Testing

Only those who belong to the group should take the test.

Mastery Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Place the number of the correct word on the line at the right.

Poultry products are important because they (1) in food value. 1.....

*The number of people engaged in poultry raising has been (2). 2.....

Poultry products make it possible for us to have many delicious (3), such as cakes and puddings. 3.....

*Poultry products are important foods in special (4) for people who are not well. 4.....

*In order to have a profitable flock, the poultry farmer must select good (5). 5.....

The most favorable location for a poultry farm is (6) a town or city. 6.....

The town or city provides a (7) for his products. 7.....

Getting rid of undesirable birds is called (8) the flock. 8.....

1. foods	6. vegetable	11. diets
2. far from	7. increasing	12. low
3. commission	8. fairly near	13. location
4. rich	9. culling	14. cleaning
5. market	10. stock	15. decreasing

Mastery Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Place the number of the correct word on the line at the right.

Poultry products are important because they ____(1)____ in food value. 1.....

The number of people engaged in poultry raising has been ____(2)____. 2.....

Poultry products make it possible for us to have many delicious ____(3)____, such as cakes and puddings. 3.....

Poultry products are important foods in special ____(4)____ for people who are not well. 4.....

With order to have a profitable flock, the poultry farmer must select good ____(5)____. 5.....

The most favorable location for a poultry farm is ____(6)____ a town or city. 6.....

The town or city provides a ____(7)____ for his products. 7.....

Getting rid of undesirable birds is called ____(8)____ the flock. 8.....

1. foods	6. vegetable	11. diets
2. far from	7. increasing	12. low
3. cumulation	8. fairly near	13. location
4. rich	9. selling	14. cleaning
5. market	10. stock	15. decreasing

*The poultry raiser who sells stock to other farmers must know and apply (9) principles of breeding. 9.....

*The poultry must be fed (10) food, combined according to scientific rules. 10.....

The flock gets a certain proportion of food by foraging. Therefore, the poultry farmer must provide a sufficiently large (11) for the flock. 11.....

Plenty of (12) water must be available so protected that it will not (13) in winter. 12..... 13.....

Young chicks are kept warm in (14) houses. 14.....

There must be (15) cleaning of the poultry houses in order to keep the flock healthy. 15.....

The poultry farmer must know how to keep the flock and house free from (16) pests. 16.....

Walls of poultry houses should be (17) and disinfected regularly. 17.....

The poultry farmer should provide clean laying (18) for the hens. 18.....

1. freeze	7. clean	13. ice
2. poor	8. brooder	14. range
3. removed	9. nourishing	15. occasional
4. whitewashed	10. roosts	16. systematic
5. scientific	11. insect	17. laying
6. food scraps	12. nests	18. spill

The poultry raiser who sells stock to other farmers must know and apply (9) principles of breeding. 9.....

The poultry must be fed (10) food, combined according to scientific rules. 10.....

The flock gets a certain proportion of food by foraging. Therefore, the poultry farmer must provide a sufficiently large (11) for the flock. 11.....

Plenty of (12) water must be available so protected that it will not (13) in winter. 12.....
13.....

Young chicks are kept warm in (14) houses. 14.....

There must be (15) cleaning of the poultry houses in order to keep the flock healthy. 15.....

The poultry farmer must know how to keep the flock and house free from (16) pests. 16.....

Walls of poultry houses should be (17) and disinfected regularly. 17.....

The poultry farmer should provide clean laying (18) for the hens. 18.....

1. freeze	7. clean	13. ice
2. poor	8. brooder	14. range
3. removed	9. roundabing	15. occasional
4. whitewashed	10. roots	16. systematic
5. scientific	11. insect	17. laying
6. food scraps	12. nests	18. split

The poultry farmer must watch out for (19) pests which may steal his birds. 19.....

Constant care is necessary to keep the various kinds of (20) in good repair. 20.....

*Birds should not be (21). Therefore, in planning poultry houses, a certain amount of (22) must be allowed for each bird. 21..... 22.....

Poultry houses should have plenty of light and (23). 23.....

An (24) needs careful regulation if the hatching process is to be successful. 24.....

The poultry farmer must (25) sick or diseased birds from the remainder of the flock. 25.....

The poultry farmer (26) the eggs to see that they are in good condition. 26.....

To bring good prices, farmers (27) eggs according to size, weight and color. 27.....

Poorly (28) eggs will be cracked and this means loss. 28.....

1. equipment
2. incubator
3. insect
4. range
5. ventilation
6. crowded
7. separate
8. disturbed
9. grade
10. candles
11. cracks
12. space
13. packed
14. graded
15. animal
16. weighs

The poultry farmer must watch out for _____ (19)
pests which may steal his birds. 19.....

Constant care is necessary to keep the
various kinds of _____ (20) in good repair. 20.....

Birds should not be _____ (21). Therefore,
in planning poultry houses, a certain amount
of _____ (22) must be allowed for each bird. 22.....

Poultry houses should have plenty of
light and _____ (23). 23.....

An _____ (24) needs careful regulation if the 24.....
hatching process is to be successful.

The poultry farmer must _____ (25) sick or dis- 25.....
eased birds from the remainder of the flock.

The poultry farmer _____ (26) the eggs to see 26.....
that they are in good condition.

To bring good prices, farmers _____ (27) eggs 27.....
according to size, weight and color.

Poorly _____ (28) eggs will be cracked and 28.....
this means loss.

1. equipment
2. incubator
3. insect
4. range
5. ventilation
6. crowded
7. separate
8. distributed
9. grade
10. candles
11. crack
12. space
13. packed
14. graded
15. animal
16. weight

Some poultry farmers sell directly to (29). Others make contracts with commission merchants. A well-managed (30) organization will save money for the farmer. 29..... 30.....

Accurate (31) of expenses and income will show the farmer whether his poultry business is profitable or not. 31.....

Some farmers raise part of the (32) on the farm. When prices are high this means great saving. 32.....

This work can be carried on the year round, thus assuring a (33) income for the poultry raiser. 33.....

The work is not exceptionally (34), and therefore women have entered this field. 34.....

Most of the work is done (35) and provides plenty of healthful (36). 35..... 36.....

*The poultry farmer has the chance to (37) production through the use of (38) methods. 37..... 38.....

1. price	7. increase	13. scientific
2. heavy	8. co-operative	14. very high
3. customers	9. 4-H	15. records
4. out of doors	10. in the winter	16. pleasant
5. feed	11. exercise	17. fertilizer
6. unions	12. regular	18. uncertain

Some poultry farmers sell directly to

(29). Others make contracts with commission 29.....

merchants. A well-managed (30) organization 30.....

will save money for the farmer.

Accurate (31) of expenses and income 31.....

will show the farmer whether his poultry

business is profitable or not.

Some farmers raise part of the (32) on 32.....

the farm. When prices are high this means

great saving.

This work can be carried on the year round,

thus securing a (33) income for the poultry 33.....

raiser.

The work is not exceptionally (34), and 34.....

therefore women have entered this field.

Most of the work is done (35) and pro- 35.....

vides plenty of healthful (36). 36.....

The poultry farmer has the chance to

(37) production through the use of (38) 37.....

methods. 38.....

1. price	7. increase	13. scientific
2. heavy	8. co-operative	14. very high
3. customers	9. 4-H	15. recorded
4. out of doors	10. in the winter	16. pleasant
5. feed	11. exercise	17. fertilizer
6. unions	12. regular	18. uncertain

The work may be started on a small (39) 39.....
and the enterprise enlarged as seems best.
For this reason the farmer does not need to
(40) much money at first. 40.....

*Poultry raisers must conform to (41) 41.....
laws.

There is always a chance for loss owing
to (42) which the farmer cannot control, 42.....
cracked (43), or (44) in marketing. 43.....

*The poultry farmer must be prepared for 44.....
(45) in prices of poultry products. This af- 45.....
fects his total income, favorably or unfavorably

Some of the tasks of the poultryman are
(46) to perform. Poultry must be cared for 46.....
(47) days of the week. 47.....

The best training for this work is re-
ceived at the (48) college. 48.....

Various national (49) associations and 49.....
supply dealers send out valuable (50) which 50.....
may help the poultry farmer. The (51) of 51.....
Agriculture gives expert information.

1. agricultural	8. Department	15. new laws
2. invest	9. State poultry	16. delay
3. regulate	10. shells	17. dangerous
4. union	11. save	18. barrels
5. accidents	12. changes	19. deduct
6. several	13. scale	20. seven
7. unpleasant	14. information	21. poultry

The work may be started on a small (39) 39.....
and the apparatus enlarged as seems best.
For this reason the farmer does not need to
(40) much money at first. 40.....

Poultry raisers must conform to (41) 41.....
laws.

There is always a chance for loss owing
to (42) which the farmer cannot control. 42.....
created (43), or (44) in marketing. 43.....
44.....

The poultry farmer must be prepared for
(45) in prices of poultry products. This af- 45.....
fects his total income, favorably or unfavorably
Some of the tasks of the poultryman are
(46) to perform. Poultry must be cared for 46.....
(47) days of the week. 47.....

The best training for this work is re-
ceived at the (48) college. 48.....

Various national (49) associations and 49.....
supply dealers send out valuable (50) which 50.....
may help the poultry farmer. The (51) of 51.....
Agriculture gives expert information.

1. agricultural	8. department	15. new laws
2. invest	9. state poultry	16. delay
3. regulate	10. shells	17. suggestions
4. union	11. save	18. barrels
5. assistants	12. changes	19. daught
6. several	13. scale	20. seven
7. unpleasant	14. information	21. poultry

*Over a period of time, the income will depend to a large degree upon the (52) of the flock, as well as the size. 52.....

The successful farmer should be a good (53) to dispose of his products. 53.....

The hours are frequently (54) and the tasks become tiresome. 54.....

The poultry farmer must be able to keep in mind the many (55) to which he must give attention. This requires good (56) of time and energy. 55..... 56.....

The poultry farmer will find that (57) of birds and houses save money. 57.....

The farmer who builds up a (58) for honesty in quality and prices is on the way to success. 58.....

Haphazard methods will afford (59) profit but the (60) performance of daily tasks is the best way to profit. 59..... 60.....

1. size
2. reputation
3. quality
4. systematic
5. long
6. buyer
7. details
8. indifferent
9. salesman
10. cleanliness
11. management
12. little
13. clubs
14. accidents
15. limited
16. modernizing

Over a period of time, the income will depend to a large degree upon the (52) of the flock, as well as the size. 52.....

The successful farmer should be a good (53) to dispose of his products. 53.....

The hours are frequently (54) and the tasks become tiresome. 54.....

The poultry farmer must be able to keep in mind the many (55) to which he must give attention. This requires good (56) of time and energy. 55..... 56.....

The poultry farmer will find that (57) of birds and houses save money. 57.....

The farmer who builds up a (58) for honesty in quality and prices is on the way to success. 58.....

Haphazard methods will afford (59) profit but the (60) performance of daily tasks is the best way to profit. 59..... 60.....

1. size	7. details	12. little
2. reputation	8. indifferent	13. climb
3. quality	9. salesman	14. accidents
4. systematic	10. cleanliness	15. limited
5. long	11. management	16. modernizing
6. buyer		

CHAPTER VI

THE NURSERYMAN

The Unit

The nurseryman raises plants, shrubs, and trees from seeds and bulbs, or through other means of propagation such as rooting and grafting. From his beds he supplies agricultural workers and home owners with a variety of nursery stock. Both capital and scientific knowledge are absolutely necessary. The nurseryman must plan ahead from two to five years before his stock has attained sufficient growth to be of sale value. The nurseryman's tasks include the selection of seeds and quality stock, arrangement of beds, and showgrounds, and the planting, cultivation, and final sale of trees, plants, and flowers. The worker who has a love for growing things, a willingness to work hard physically, and a courage able to withstand loss and discouragement, will find great compensation in the service he renders, as well as adequate financial returns. The growing interest in beautifying home and community surroundings will mean an increasing demand for well-trained nursery workers.

(Approximate time allotment - six to eight periods)

CHAPTER VI

THE NURSERYMAN

The Unit

The nurseryman raises plants, shrubs, and trees from seeds and bulbs, or through other means of propagation such as rooting and grafting. From his beds he supplies agricultural workers and home owners with a variety of nursery stock. Both capital and scientific knowledge are absolutely necessary. The nurseryman must plan ahead from two to five years before his stock has attained sufficient growth to be of sale value. The nurseryman's tasks include the selection of seeds and quality stock, arrangement of beds, and show-grounds, and the planting, cultivation, and final sale of trees, plants, and flowers. The worker who has a love for growing things, a willingness to work hard physically, and a courage able to withstand loss and discouragement, will find great compensation in the service he renders, as well as adequate financial returns. The growing interest in beautifying home and community surroundings will mean an increasing demand for well-trained nursery workers.

(Approximate time allotment - six to eight periods)

The Delimitation

Service to Others:

1. The nurseryman makes possible the work of farmers, fruit growers, florists, gardeners, and foresters in supplying plants, shrubs, and trees to meet their needs.

2. The nurseryman adds to the beauty of homes and communities through making decorative plants, trees, and shrubs available.

*3. The nurseryman may, through experimentation add new varieties of plants.

Required Tasks

The tasks of the nurseryman are many and varied.

*1. If a beginner, the nurseryman must choose his location carefully.

*2. He must plan to have enough capital to carry him over many dull days for at least two years.

3. He must provide a certain amount of equipment, including a small greenhouse for new plants, hot beds, cutting frames, cold frames, a storage and packing shed, and cultivating machinery.

4. He may find it profitable to carry on some florist work.

5. The nurseryman must have a license indicating that his nursery has been inspected by government officials.

The Delimitation

Service to Others:

1. The nurseryman makes possible the work of farmers, fruit growers, florists, gardeners, and foresters in supplying plants, shrubs, and trees to meet their needs.

2. The nurseryman adds to the beauty of homes and communities through making decorative plants, trees, and shrubs available.

*3. The nurseryman may, through experimentation add new varieties of plants.

Required Tasks

The tasks of the nurseryman are many and varied.

*1. If a beginner, the nurseryman must choose his location carefully.

*2. He must plan to have enough capital to carry him over many dull days for at least two years.

3. He must provide a certain amount of equipment, including a small greenhouse for new plants, hot beds, cutting frames, cold frames, a storage and packing shed, and cultivating machinery.

4. He may find it profitable to carry on some floral work.

5. The nurseryman must have a license indicating that his nursery has been inspected by government officials.

6. Some nurserymen raise all the stock which they sell. Others buy certain varieties from special nurseries.

7. The nurseryman must plant his seeds. He may grow new plants through cutting, rooting, budding, or grafting. He must cultivate the soil, using fertilizer. He must plow and harrow the ground, and arrange for irrigation where necessary.

8. The growing trees, plants, and shrubs must be pruned, thinned out, and sprayed regularly.

9. He must transplant stock at the right time.

10. He must arrange a system of beds, so that stock may be located easily. Large nurseries have a map of the area with numbers signifying various beds. He should plan for plenty of space between plants. A good arrangement makes cultivation easy.

11. He pots plants and digs up shrubs and trees as ordered.

12. He must make arrangements for covering plants in case of cold weather. Protection from winds by hedges and buildings should be considered.

*13. The nurseryman should allow for some rotation of plants.

14. He must plan an attractive and convenient show-ground to inform customers of the variety of the stock.

*15. The successful nurseryman keeps very careful

6. Some nurserymen raise all the stock which they sell, others buy certain varieties from special nurseries.

7. The nurseryman must plant his seeds. He may grow new plants through cutting, rooting, budding, or grafting. He must cultivate the soil, using fertilizer. He must plow and harrow the ground, and arrange for irrigation where necessary.

8. The growing trees, plants, and shrubs must be pruned, thinned out, and sprayed regularly.

9. He must transplant stock at the right time.

10. He must arrange a system of beds, so that stock may be located easily. Large nurseries have a map of the area with numbers signifying various beds. He should plan for plenty of space between plants. A good arrangement makes cultivation easy.

11. He pots plants and digs up shrubs and trees as ordered.

12. He must make arrangements for covering plants in case of cold weather. Protection from winds by hedges and buildings should be considered.

*13. The nurseryman should allow for some rotation of plants.

14. He must plan an attractive and convenient show-room to inform customers of the variety of the stock.

*15. The successful nurseryman keeps very careful

records of the demands of his community. On this he bases the variety of stock he is to raise.

16. He must keep careful record of costs to insure asking the correct price. He should record the year of planting, the size, cost in the beginning, hours of labor spent in cultivating, pruning, and transplanting, and the cost of transporting the stock. This will indicate a fair price.

*17. Besides raising nursery stock, he must dig it up correctly and pack well to sell. Balling and burlaping of young trees is important.

18. He must spend much time in study.

19. He must keep his nursery in order.

20. He must arrange for transportation of goods sold so that they will not be crushed.

*21. Sometimes the nurseryman raises plants in wire baskets. When sold, basket goes with plant.

22. Some nurseries carry on a <u>landscape gardening</u> service.

23. The nurseryman must direct the work of his assistants.

24. He must know and obey State laws concerning the transportation of plants.

25. The successful nurseryman will join one of the many <u>horticultural associations</u>.

records of the demands of his community. On this he bases the variety of stock he is to raise.

15. He must keep careful record of costs to insure making the correct price. He should record the year of planting, the size, cost in the beginning, hours of labor spent in cultivating, pruning, and transplanting, and the cost of transporting the stock. This will indicate a fair price.

17. Besides raising nursery stock, he must dig it up correctly and pack well to sell. Balling and burlaping of young trees is important.

18. He must spend much time in study.

19. He must keep his nursery in order.

20. He must arrange for transportation of goods sold so that they will not be crushed.

21. Sometimes the nurseryman raises plants in wire baskets. When sold, basket goes with plant.

22. Some nurseries carry on a landscape gardening service.

23. The nurseryman must direct the work of his assistants.

24. He must know and obey State laws concerning the transportation of plants.

25. The successful nurseryman will join one of the many horticultural associations.

Advantages and Disadvantages

1. The work is out of doors. There is opportunity for healthful exercise in fresh air.

*2. The opportunities for this worker are growing.

*3. The nurseryman may help to create new varieties.

4. He works with growing and beautiful things.

5. He has a chance to experiment and to learn many new things.

6. He has the opportunity of meeting many people.

7. He may feel that he is rendering important service.

8. There are many horticultural organizations to which he may belong, and from which he may receive much help.

9. There are periods, especially in the winter, when leisure time may be enjoyed.

10. The work of the nurseryman is more lasting than most other work.

11. The chief disadvantage is the chance for loss of young plants through disease, insect pests, weather, and accidents in transportation.

12. The nurseryman must wait years to see the fruit of his labors.

13. There are rush seasons and dull seasons.

14. Decorative shrubs and plants are a luxury. When hard times come, the income of the nursery is seriously affected.

Advantages and Disadvantages

1. The work is out of doors. There is opportunity for healthful exercise in fresh air.

2. The opportunities for this worker are growing.

3. The nurseryman may help to create new varieties.

4. He works with growing and beautiful things.

5. He has a chance to experiment and to learn many new things.

6. He has the opportunity of meeting many people.

7. He may feel that he is rendering important service.

8. There are many horticultural organizations to which he may belong, and from which he may receive much help.

9. There are periods, especially in the winter, when leisure time may be enjoyed.

10. The work of the nurseryman is more lasting than most other work.

11. The chief disadvantage is the chance for loss of young plants through disease, insect pests, weather, and accidents in transportation.

12. The nurseryman must wait years to see the fruit of his labors.

13. There are rush seasons and dull seasons.

14. Decorative shrubs and plants are a luxury. When hard times come, the income of the nursery is seriously affected.

15. The hours are long and irregular. There is much work.

*16. Nurserymen oftentimes have to replace bushes and plants because the new owners did not care for them properly. For this reason many nurserymen refuse to make replacements.

Training

1. The best training for this work is a four year course in horticulture at a State agricultural college.

2. Much may be gained from practical experience if attended by wide reading and intensive study. The nurseryman needs to know the scientific names of a large variety of plants, their uses, and conditions necessary for fine growth. Courses in business management and salesmanship would help.

Financial Returns

The income of the worker depends upon the location of the nursery, the type of community served, the size of the business, and the prices charged.

Abilities Needed

1. The nurseryman must be able to plan ahead.

*2. He should know his community and the opportunity it offers.

3. He must be able to meet many problems. This means alert, intelligent thinking.

4. He must be able to meet people and to work agreeably

15. The hours are long and irregular. There is much work.

*16. Nurserymen oftentimes have to replace bushes and plants because the new owners did not care for them properly. For this reason many nurserymen refuse to make replacements.

Training

1. The best training for this work is a four year course in horticulture at a State agricultural college.

2. Much may be gained from practical experience if attended by wide reading and intensive study. The nurseryman needs to know the scientific names of a large variety of plants, their uses, and conditions necessary for fine growth. Courses in business management and salesmanship would help.

Financial Returns

The income of the worker depends upon the location of the nursery, the type of community served, the size of the business, and the prices charged.

Abilities Needed

1. The nurseryman must be able to plan ahead.

*2. He should know his community and the opportunity it offers.

3. He must be able to meet many problems. This means alert, intelligent thinking.

4. He must be able to meet people and to work agreeably

with others. As a manager he must be able to direct others.

5. He must have the ability to work long hours and still maintain good health and strong muscles.

6. He must be businesslike and trustworthy, and anxious to serve his customers well.

7. The nurseryman should be able to advise his customers concerning the selection, arrangement, and care of plants.

8. This worker should have courage in face of loss.

9. The nurseryman who would succeed must have a genuine love for growing plants and flowers.

10. He must try to develop his sales ability as well as his knowledge of flowers, shrubs, plants, and trees.

Unit Assignment

(Approximate time allotment - six to eight periods)

This is a unit that is planned for group work. The number in a group will range from six to eight pupils.

(The teacher plans in advance to have in the room a number of books dealing with the nurseryman. A few pertinent pictures that suggest the type of work should be ready for use.)

(SG-1) Organize your group. Select a leader. This will help in keeping your discussions orderly. The chairman will assign any special job that any member should do. A

with others. As a manager he must be able to direct others.

5. He must have the ability to work long hours and still maintain good health and strong muscles.

6. He must be businesslike and trustworthy, and anxious to serve his customers well.

7. The nurseryman should be able to advise his customers concerning the selection, arrangement, and care of plants.

8. This worker should have courage in face of loss.

9. The nurseryman who would succeed must have a genuine love for growing plants and flowers.

10. He must try to develop his sales ability as well as his knowledge of flowers, shrubs, plants, and trees.

Unit Assignment

(Approximate time allotment - six to eight periods)

This is a unit that is planned for group work. The number in a group will range from six to eight pupils.

(The teacher plans in advance to have in the room a number of books dealing with the nurseryman. A few pertinent pictures that suggest the type of work should be ready for use.)

(30-1) Organize your group. Select a leader. This will help in keeping your discussions orderly. The chairman will assign any special job that any member should do. A

secretary should keep notes on discussions. All must co-operate if your group work is to be a success.

Service to Others

(SG-2) The nurseryman serves many people. For example, the gardener may buy flowering plants from the nurseryman. List all the types of workers whom the nurseryman serves. (2) Chap. 1.

(*SG-3) How does the nurseryman serve the citizens of a community? (2) Chap. 1.

Required Tasks

(SG-4) Before continuing this study, make arrangements to visit a near-by nursery. If all in your group cannot go, delegate one or two members to take the trip. Ask your teacher how to make arrangements. Take notes for group discussion.

(SG-5) Look through a nursery catalogue. What has the nurseryman to offer? In order to have these plants, shrubs, and trees for sale, what are some of the jobs he must do? *About how long does it take to raise a shrub that is large enough to be sold? How does he force the growth of plants so that little time is lost? (3), pp. 64-65; (5) pp. 22-25; (6) p. 251; (7) p. 28; (8) p. 15.

(*SG-6) What are some facts that a nurseryman should consider before choosing a location for his nursery? (2)

(SG-7) Make a list of the equipment needed by the

secretary should keep notes on discussions. All must co-operate if your group work is to be a success.

Service to Others

(SG-2) The nurseryman serves many people. For example, the gardener may buy flowering plants from the nurseryman. List all the types of workers whom the nurseryman serves.

(2) Chap. 1.

(SG-3) How does the nurseryman serve the citizens of a community? (2) Chap. 1.

Required Tasks

(SG-4) Before continuing this study, make arrangements to visit a near-by nursery. If all in your group cannot go, delegate one or two members to take the trip. Ask your teacher how to make arrangements. Take notes for group discussion.

(SG-5) Look through a nursery catalogue. What has the nurseryman to offer? In order to have these plants, shrubs, and trees for sale, what are some of the jobs he must do? About how long does it take to raise a shrub that is large enough to be sold? How does he force the growth of plants so that little time is lost? (3), pp. 64-65; (5) pp. 28-29; (6) p. 261; (7) p. 28; (8) p. 15.

(*SG-6) What are some facts that a nurseryman should consider before choosing a location for his nursery? (8)

(SG-7) Make a list of the equipment needed by the

nurseryman. What is a "show ground"?

(SG-8) How does a nurseryman know how much to charge for a rose bush, a shrub, or young tree?

Advantages and Disadvantages

(SG-9) Make a table with two columns. Label the first "Advantages". Label the second column "Disadvantages". In the first column list the good points of this work. This will include things that are good for the worker physically, mentally, and socially, and those that help his character. List also those points which are enjoyable. Under Disadvantages list those points which are unpleasant or undesirable. (3) p. 75; (8) pp. 1-2; (2).

Training

(SG-10) How would you advise a young man to train for this work? Why? What other ways would you suggest? Look up the subjects that would be included in a college course. (3) p. 73; (8) pp. 3-4.

Financial Returns

(SG-11) Not all nurserymen receive the same income. Upon what factors will the income depend? *What type of nursery would yield a small profit? *a good living?

Abilities Needed

(SG-12) Review the work of the nurseryman and the service he gives. What type of man would be able to do this work? What abilities must he have in order to make the

nurseryman. What is a "slow ground"?

(30-8) How does a nurseryman know how much to charge for a rose bush, a shrub, or young tree?

Advantages and Disadvantages

(30-9) Make a table with two columns. Label the first "Advantages". Label the second column "Disadvantages". In the first column list the good points of this work. This will include things that are good for the worker physically, mentally, and socially, and those that help his character. List also those points which are enjoyable. Under Disadvantages list those points which are unpleasant or undesirable. (3) p. 75; (8) pp. 1-2; (2).

Training

(30-10) How would you advise a young man to train for this work? Why? What other ways would you suggest look up the subjects that would be included in a college course. (3) p. 73; (6) pp. 3-4.

Financial Returns

(30-11) Not all nurserymen receive the same income. Upon what factors will the income depend? What type of nursery would yield a small profit? a good living?

Abilities Needed

(30-12) Review the work of the nurseryman and the service he gives. What type of man would be able to do this work? What abilities must he have in order to make the

business a success? (8) p. 3.

(SG-13) Plan a report on the nurseryman to be written in an attractive form, and present it to your teacher.

(SG-14) Select one or more of the optional activities to present to the class. No other group is studying the nurseryman. Your class depends upon you to give them as complete a report as possible. This is your opportunity to help.

References

1. Simonds, O. C., Landscape Gardening, MacMillan Co., New York, N. Y., 1920

2. Coon, Nelson, Nursery Sales and Management, A. T. De La Mare Co., Inc., New York, N. Y., 1931.

3. Proctor, William Martin, Vocations, Houghton Mifflin Co. New York, N. Y., 1929.

4. Edmonson, James B. and Dondineau, Arthur, Vocations Through Problems, MacMillan Co., New York, N. Y., 1937.

5. Lane, Mary Rogers, Vocations in Industry, Volume I, International Textbook Co., Scranton, Pa., 1929.

6. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

7. Fleichman, Doris E., An Outline of Careers for Women, Doubleday, Doran and Co., Inc., New York, N. Y., 1931.

8. Career Monograph No. 21, Horticulture as a Career, The Institute for Research, Chicago, Ill., 1930.

9. Gown, Enoch Burton, Wheatley William Alonzo, and Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1923.

Note: Many books dealing with general agriculture do not mention the nurseryman. However, much of the information

business a success? (8) p. 3.

(38-13) Plan a report on the nurseryman to be written in an attractive form, and present it to your teacher.

(38-14) Select one or more of the optional activities to present to the class. No other group is studying the nurseryman. Your class depends upon you to give them as complete a report as possible. This is your opportunity to help.

References

1. Simonds, O. C., Landscape Gardening, MacMillan Co., New York, N. Y., 1920

2. Coon, Nelson, Nursery Sales and Management, A. T. De La Mare Co., Inc., New York, N. Y., 1931.

3. Proctor, William Martin, Vocations, Houghton Mifflin Co. New York, N. Y., 1929.

4. Edmonson, James E. and Lundinsky, Arthur, Vocations Through Problems, MacMillan Co., New York, N. Y., 1937.

5. Lane, Mary Rogers, Vocations in Industry, Volume I, International Textbook Co., Scranton, Pa., 1929.

6. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

7. Fleishman, Doris E., An Outline of Careers for Women, Doubleday, Doran and Co., Inc., New York, N. Y., 1931.

8. Career Monograph No. 21, Horticulture as a Career, The Institute for Research, Chicago, Ill., 1930.

9. Cowan, Lucch Burton, Wheatley William Alonzo, and Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1932.

Note: Many books dealing with general agriculture do not mention the nurseryman. However, much of the information

under general agriculture will apply to the nurseryman. Be sure to include such books in your reading. Consult the librarian for other suggestions. Remember that the problems of the nurseryman are similar to those of other growers.

Optional Activities

1. Plan to make a group notebook on the nurseryman. Illustrate it with pictures from magazines and catalogues.

2. Prepare a list of books which would be helpful in studying this occupation.

3. Locate some of the nurseries in and around Providence. Which is the largest?

4. Plan an exhibit of the nurseryman's occupation. Use pictures and objects. Perhaps you could arrange a table to represent a nursery.

5. Make a series of simple drawings showing the nurseryman at work.

6. Draw a plan for a nursery. Where would you put the "show ground"? Why?

7. Show by a diagram the relation of the nurseryman to other agricultural workers.

8. Make a list of some of the questions that customers might ask a nurseryman.

9. Dramatize a customer making arrangements with a nurseryman for planting shrubs, grass, flowers, and trees on

under general agriculture will apply to the nurseryman. Be sure to include such books in your reading. Consult the librarian for other suggestions. Remember that the problems of the nurseryman are similar to those of other growers.

Optional Activities

1. Plan to make a group notebook on the nurseryman. Illustrate it with pictures from magazines and catalogues.

2. Prepare a list of books which would be helpful in studying this occupation.

3. Locate some of the nurseries in and around Providence. Which is the largest?

4. Plan an exhibit of the nurseryman's occupation. Use pictures and objects. Perhaps you could arrange a table to represent a nursery.

5. Make a series of simple drawings showing the nurseryman at work.

6. Draw a plan for a nursery. Where would you put the "show ground"? Why?

7. Show by a diagram the relation of the nurseryman to other agricultural workers.

8. Make a list of some of the questions that customers might ask a nurseryman.

9. Dramatize a customer making arrangements with a nurseryman for planting shrubs, grass, flowers, and trees on

the grounds of a newly built house. What conversation would take place?

10. Make a Nurseryman's Calendar. You may illustrate this by simple drawings. Each group member may find out the most important work for two months of the year. For example, winter months may mean more work in the hot house. Consult nursery books for this information.

11. If you were a nurseryman, to what magazines might you subscribe? Why? Try to find some sample magazines to illustrate your choice.

12. Suppose you were asked to present one feature of a flower show. This would not only be educational for the public, but splendid advertising for your firm. Make a sketch of the scene you would present. Work for a blue ribbon.

Class Presentation Period

The group will decide upon the most effective presentation of the required and optional activities. Opportunity for questions, additional information, and suggestions should be provided.

Test:

The test will be given to members of the Nursery Group only.

the grounds of a newly built house. What conversation would take place?

10. Make a Nurseryman's Calendar. You may illustrate this by simple drawings. Each group member may find out the most important work for two months of the year. For example, winter months may mean more work in the hot house. Consult nursery books for this information.

11. If you were a nurseryman, to what magazines might you subscribe? Why? Try to find some sample magazines to illustrate your choice.

12. Suppose you were asked to present one feature of a flower show. This would not only be educational for the public, but splendid advertising for your firm. Make a sketch of the scene you would present. Work for a blue ribbon.

Class Presentation Period

The group will decide upon the most effective presentation of the required and optional activities. Opportunity for questions, additional information, and suggestions should be provided.

Test:

The test will be given to members of the Nursery Group only.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The nurseryman is the worker who specializes in 1.....

a) raising fruits and vegetables.
b) the planning of formal gardens.
c) the raising of flowers, seeds, shrubs, and young trees.
d) the conservation of forest land.

*The nurseryman may combine his work with that of 2.....

a) the florist.
b) the forest ranger.
c) the market gardener.
d) the fruit grower.

The nurseryman usually arranges the beds systematically so that 3.....

a) the various plants will be easy to locate.
b) the motorist gets a view of the whole nursery.
c) there will be one plant of each variety in every nursery bed.
4) he will not be confused by the large number of plants.

The nurseryman usually arranges for an attractive showground in order that 4.....

a) his nursery will make a fine appearance.
b) the assistants will know what plants he has.
c) the customer can be served immediately by digging plants from the showground.
d) the customer may see the variety of plants which the nurseryman has for sale.

The wise nurseryman decides what kind of stock to have on hand 5.....

a) according to advice from large nurseries.
b) according to plans of the exclusive garden clubs.
c) according to the type of community he serves.
d) according to the amount of money he has to spend.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The nurseryman is the worker who specializes in 1.....

a) raising fruits and vegetables.
b) the planning of formal gardens.
c) the raising of flowers, seeds, shrubs, and young trees.
d) the conservation of forest land.

The nurseryman may combine his work with that of 2.....

a) the florist.
b) the forest ranger.
c) the market gardener.
d) the fruit grower.

The nurseryman usually arranges the beds systematically so that 3.....

a) the various plants will be easy to locate.
b) the motorist gets a view of the whole nursery.
c) there will be one plant of each variety in every nursery bed.
d) he will not be confused by the large number of plants.

The nurseryman usually arranges for an attractive showground in order that 4.....

a) his nursery will make a fine appearance.
b) the assistants will know what plants he has.
c) the customer can be served immediately by digging plants from the showground.
d) the customer may see the variety of plants which the nurseryman has for sale.

The wise nurseryman decides what kind of stock to have on hand 5.....

a) according to advice from large nurseries.
b) according to plans of the exclusive garden clubs.
c) according to the type of community he serves.
d) according to the amount of money he has to spend.

The best training for this work is 6.....

a) helping a nurseryman who works scientifically.
b) a four year course in horticulture.
c) a correspondence course in agriculture.
d) trying out a backyard nursery.

*The nurseryman who would succeed in his business should 7.....

a) buy and sell any quality of stock that is requested.
b) give no information about planting unless requested to do so.
c) improve his salesmanship.
d) not bother his community by suggesting what to buy.

*The man who will get the most joy out of his nursery work is 8.....

a) the man who has the most information concerning trees and plants.
b) the man who has a real love for growing things.
c) the man who makes the most money from the nursery.
d) the man who is an inventor.

Many people believe there is a great future for the nurseryman because 9.....

a) the prices of trees, shrubs, and plants are going up.
b) the number of workers is decreasing.
c) great corporations are buying up nurseries.
d) there is a growing interest in beautifying home and community surroundings by people of all classes.

*The most important reason why a nurseryman should join a horticultural association is 10.....

a) to increase his knowledge and ability to serve others.
b) to increase the number of customers and his profit
c) to advertise his nursery.
d) to make friends and meet people.

The best training for this work is 6.....

a) helping a nurseryman who works scientifically.
b) a four year course in horticulture.
c) a correspondence course in agriculture.
d) trying out a backyard nursery.

*The nurseryman who would succeed in his business should 7.....

a) buy and sell any quality of stock that is requested.
b) give no information about planting unless requested to do so.
c) improve his salesmanship.
d) not bother his community by suggesting what to buy.

*The man who will get the most joy out of his nursery work is 8.....

a) the man who has the most information concerning trees and plants.
b) the man who has a real love for growing things.
c) the man who makes the most money from the nursery.
d) the man who is an inventor.

Many people believe there is a great future for the nurseryman because 9.....

a) the prices of trees, shrubs, and plants are going up.
b) the number of workers is decreasing.
c) great corporations are buying up nurseries.
d) there is a growing interest in beautifying home and community surroundings by people of all classes.

*The most important reason why a nurseryman should join a horticultural association is 10.....

a) to increase his knowledge and ability to serve others.
b) to increase the number of customers and his profit
c) to advertise his nursery.
d) to make friends and meet people.

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The nurseryman makes possible the work of 1.....

the (1), (2), and (3). 2.....

The nurseryman adds (4) to our homes and 3.....

communities. 4.....

In order to develop new varieties in plants

and flowers, the nurseryman may (5) the various 5.....

seeds and plants in his laboratory garden.

The nurseryman needs enough (6) to be able 6.....

to carry on the business for at least two years

with little income. The equipment in which a

nurseryman must invest his money includes a (7) 7.....

and cold (8). 8.....

The nurseryman must be ready to have his

nursery (9) by government officials. 9.....

Some nurserymen specialize in (10). The 10.....

nurseryman must know how to start new plants

through cutting, budding, and (11). 11.....

1. frames	8. forester	15. transportation
2. distributed	9. busy	16. fruit grower
3. dairy farmer	10. experiment with	17. beds
4. landscape gardener	11. pasture land	18. inspected
5. landscape	12. greenhouse	19. variety
6. beauty	13. throw out	20. trees
7. rooting	14. capital	21. transplanting

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The nurseryman makes possible the work of 1.....

the (1) , (2) , and (3) . 2.....

The nurseryman adds (4) to our homes and 3.....

communities. 4.....

In order to develop new varieties in plants

and flowers, the nurseryman may (5) the various 5.....

seeds and plants in his laboratory garden.

The nurseryman needs enough (6) to be able 6.....

to carry on the business for at least two years

with little income. The equipment in which a

nurseryman must invest his money includes a (7) 7.....

and cold (8) . 8.....

The nurseryman must be ready to have his

nursery (9) by government officials. 9.....

Some nurseryman specialize in (10). The 10.....

nurseryman must know how to start new plants

through cutting, budding, and (11). 11.....

1. frames	8. forester	15. transportation
2. distributed	9. busy	16. fruit grower
3. dairy farmer	10. experiment with	17. beds
4. landscape gardener	11. pasture land	18. inspected
5. landscape	12. greenhouse	19. variety
6. beauty	13. throw out	20. trees
7. roofing	14. capital	21. transplanting

The nurseryman arranges his beds with plenty of space between plants and rows so that (12) will be made easier. 12.....

The price a nurseryman charges for his shrub, tree, or plant will depend largely on the size and (13) of work spent in cultivation. 13.....

The nurseryman must arrange for careful (14) of trees, plants, or shrubs in order that none shall be crushed before reaching its destination. 14.....

The nurseryman has the advantage of working (15) with plenty of fresh air and healthful (16). 15..... 16.....

The nurseryman may enjoy some (17) time in winter. 17.....

The nurseryman may save his trees and plants from insect pests by (18) them. 18.....

He must use plenty of (19) to maintain rich soil. 19.....

1. exercise
2. leisure
3. pruning
4. kind
5. selling
6. busy
7. loss
8. transportation
9. seeds
10. out of doors
11. cultivation
12. hours
13. hard
14. spraying
15. fertilizer

The nurseryman arranges his beds with 12.....
plenty of space between plants and rows so
that (12) will be made easier.

The price a nurseryman charges for his
shrub, tree, or plant will depend largely on
the size and (13) of work spent in cultivation. 13.....

The nurseryman must arrange for careful
(14) of trees, plants, or shrubs in order that 14.....
none shall be crushed before reaching its desti-
nation.

The nurseryman has the advantage of work-
ing (15) with plenty of fresh air and health- 15.....
ful (16). 16.....

The nurseryman may enjoy some (17) time 17.....
in winter.

The nurseryman may save his trees and
plants from insect pests by (18) them. 18.....

He must use plenty of (19) to maintain 19.....
rich soil.

1. exercise	6. hurry	11. cultivation
2. labors	7. hose	12. house
3. pruning	8. transportation	13. care
4. kind	9. seeds	14. spraying
5. selling	10. out of doors	15. fertilizer

The chief disadvantage is the chance for

(20). 20.....

The nurseryman may not be able to fight

successfully those (21) pests and plant dis- 21.....

eases which will spoil his plants.

The hours of the nursery worker are long

and often (22). 22.....

The nurseryman must have (23) for it may 23.....

take years for his trees and bushes to gain

the right size.

The nurseryman (24) his trees to make 24.....

them the right shape and size.

The nurseryman may feel that his work is

of (25) value. 25.....

The income of the nurseryman will depend

upon the type of community served and the

(26) of his establishment. 26.....

The nurseryman may (27) in the growing 27.....

of certain trees, plants, and flowers.

1. sprays	6. specialize	11. irregular
2. exchange	7. size	12. accurate
3. short	8. insect	13. loss
4. lasting	9. patience	14. prunes
5. disturbances	10. style	15. beautiful

The chief disadvantage is the chance for

(20). 20.....

The nurseryman may not be able to fight successfully these (21) pests and plant diseases which will spoil his plants. 21.....

The hours of the nursery worker are long and often (22). 22.....

The nurseryman must have (23) for it may take years for his trees and bushes to gain the right size. 23.....

The nurseryman (24) his trees to make them the right shape and size. 24.....

The nurseryman may feel that his work is of (25) value. 25.....

The income of the nurseryman will depend upon the type of community served and the (26) of his establishment. 26.....

The nurseryman may (27) in the growing of certain trees, plants, and flowers. 27.....

1. spray	6. specialize	11. irregular
2. evidence	7. size	12. accurate
3. short	8. insect	13. loss
4. lasting	9. patience	14. prunes
5. nurseryman	10. style	15. beautiful

The Nurseryman must continually add to his (28) of trees, shrubs, and flowers. 28.....

The nurseryman must have (29) to meet the disappointments which may come from loss through unseasonal weather, careless transportation, and plant pests. The nurseryman may start and protect young plants in (30) beds. 29..... 30.....

The beginning nurseryman should carefully consider the cost of the land and the type of community when deciding upon the (31) of his business. 31.....

Young plants that have been started under glass must be (32) into regular beds when weather permits. 32.....

Like the farmer, the nurseryman gets best results by occasionally (33) his plant beds. 33.....

Before being delivered, young trees are dug up and the roots are wrapped in (34). 34.....

Spring and summer are (35) seasons for the nurseryman. 35.....

1. transplanted	6. flower	11. paper
2. rotating	7. knowledge	12. rush
3. location	8. courage	13. income
4. burlap	9. hot	14. discouragement
5. dull	10. troubles	15. seeded

The Nurseryman must continually add to his _____ (28) of trees, shrubs, and flowers. 28.....

The nurseryman must have _____ (29) to meet the disappointments which may come from loss through unseasonal weather, careless transportation, and plant pests. The nurseryman may start and protect young plants in _____ (30) beds. 30.....

The beginning nurseryman should carefully consider the cost of the land and the type of community when deciding upon the _____ (31) of his business. 31.....

Young plants that have been started under glass must be _____ (32) into regular beds when weather permits. 32.....

Like the farmer, the nurseryman gets best results by occasionally _____ (33) his plant beds. 33.....

Before being delivered, young trees are dug up and the roots are wrapped in _____ (34). 34.....

Spring and summer are _____ (35) seasons for the nurseryman. 35.....

1. transplanted
2. rotating
3. location
4. burlap
5. dull
6. flower
7. knowledge
8. courage
9. hot
10. troubles
11. paper
12. rush
13. income
14. discouragement
15. seeded

CHAPTER VII

THE FLORIST

The Unit

The raising of plants and flowers to be sold in pots or as cut blooms is the work of the florist. Warm climates permit outdoor gardens in addition to greenhouse beds. Constant attention to soil, cultivation, light, and temperature is essential. Seasonal demands for certain plants and flowers necessitate long planning ahead. A course in floriculture provides a background for successful work in this field, but business ability and salesmanship are also important. Despite the risks involved, the joy of working with the beautiful, and the opportunity to share that beauty with others, give the florist untold satisfaction in his work.

(Approximate time allotment - six periods)

The Delimitation

Service to Others

1. The florist provides us with materials for floral decoration in our homes, churches, and other places where people meet.

CHAPTER VII

THE FLORIST

The Unit

The raising of plants and flowers to be sold in pots or as cut blooms is the work of the florist. Warm climates permit outdoor gardens in addition to greenhouse beds. Constant attention to soil, cultivation, light, and temperature is essential. Seasonal demands for certain plants and flowers necessitate long planning ahead. A course in floriculture provides a background for successful work in this field, but business ability and salesmanship are also important. Despite the risks involved, the joy of working with the beautiful, and the opportunity to share that beauty with others, give the florist untold satisfaction in his work.

(Approximate time allotment - six periods)

The Delimitation

<u>Service to Others</u>

1. The florist provides us with materials for <u>floral decoration</u> in our homes, churches, and other places where people meet.

2. Through flowers we may send messages of cheer to the sick, sympathy to those who are in sorrow, and appreciation, congratulations, and good wishes on special occasions. The florists' slogan "Say it with flowers" has been widely accepted.

*3. The florist makes possible prompt delivery of flowers both winter and summer. The large selection of flowers during the cold months is a great convenience to busy people.

4. The florist's plants may be set out in our gardens, thus adding beauty to our home surroundings.

*5. To a limited extent in our country, flowers are used to make perfumes.

Required Tasks

1. The young florist should select a location fairly near or within the limits of a town or city. This is necessary because flowers are very perishable.

2. Planning his flower beds many months ahead is another important job of the florist.

3. Adequate equipment is needed for successful flower culture. There must be provision for heating and watering. Refrigerator cases are needed to keep cut flowers fresh. Convenient tools, flower pots, wire frames, baskets, boxes, paper, cards, ribbon, and twine are important, though small, details.

2. Through flowers we may send messages of cheer to the sick, sympathy to those who are in sorrow, and appreciation, congratulations, and good wishes on special occasions. The florists' slogan "Say it with flowers" has been widely accepted.

#3. The florist makes possible prompt delivery of flowers both winter and summer. The large selection of flowers during the cold months is a great convenience to busy people.

4. The florist's plants may be set out in our gardens, thus adding beauty to our home surroundings.

#5. To a limited extent in our country, flowers are used to make perfumes.

Required Tasks

1. The young florist should select a location fairly near or within the limits of a town or city. This is necessary because flowers are very perishable.

2. Planning his flower beds many months ahead is another important job of the florist.

3. Adequate equipment is needed for successful flower culture. There must be provision for heating and watering. Refrigerator cases are needed to keep cut flowers fresh. Convenient tools, flower pots, wire frames, baskets, boxes, paper, cards, ribbon, and twine are important, though small details.

4. The florist must select his seeds and bulbs carefully. Planting at just the right time will insure flowers when in demand. He must maintain the richness of the soil by supplying the best fertilizer.

5. There is constant work such as weeding, transplanting, spraying, and watering. The heating must be regulated so that an even temperature is maintained. Plant and insect pests must be prevented through washing, spraying, or pruning.

6. Plants ready for sale must be potted and the blossoms cut.

7. The packing of flowers for delivery must be done very carefully.

8. The florist usually makes floral designs. He arranges special bouquets, baskets, and corsages. This must be done so that the effect is artistic and colorful. Many florists are called upon to take charge of the floral decorations in homes or public places for special occasions.

9. The florist must take orders and arrange for their prompt delivery.

10. He must keep accurate accounts.

11. When necessary, the florist may have to order certain flowers from another greenhouse.

12. In most cases, the florist has a store where people may come in to buy flowers. The store must be neat,

4. The florist must select his seeds and bulbs carefully. Planting at just the right time will insure flowers when in demand. He must maintain the richness of the soil by supplying the best fertilizer.

5. There is constant work such as weeding, transplanting, spraying, and watering. The heating must be regulated so that an even temperature is maintained. Plant and insect pests must be prevented through washing, spraying, or pruning.

6. Plants ready for sale must be potted and the diseases out.

7. The packing of flowers for delivery must be done very carefully.

8. The florist usually makes floral designs. He arranges special bouquets, baskets, and corsages. This must be done so that the effect is artistic and colorful. Many florists are called upon to take charge of the floral decorations in homes or public places for special occasions.

9. The florist must take orders and arrange for their prompt delivery.

10. He must keep accurate accounts.

11. When necessary, the florist may have to order certain flowers from another greenhouse.

12. In most cases, the florist has a store where people may come in to buy flowers. The store must be neat,

clean, and conveniently arranged. A pleasing display in the window will attract customers. Customers often ask questions, and the florist must be ready to give information and advice.

Advantages and Disadvantages

1. The florist may feel that he is adding to the beauty and happiness of his community.

2. The florist conducts his business the year round so that he has a fairly steady income.

*3. There is a chance for experimentation and an opportunity to learn many new things. This makes the work very interesting.

4. He works with beautiful growing things. The surroundings are pleasant.

5. The work is not heavy. For this reason, there is an opening for women in this field.

6. A person interested in this work may start on a small scale as a neighborhood florist and later enlarge his business.

7. The work provides for fresh air and healthful exercise. The new problems keep him mentally alert. A successful florist has the same social standing as any prosperous business man.

8. The worker has a chance to express his own ideas in the arrangement of flowers.

clean, and conveniently arranged. A pleasing display in the window will attract customers. Customers often ask questions, and the florist must be ready to give information and advice.

Advantages and Disadvantages

1. The florist may feel that he is adding to the beauty and happiness of his community.

2. The florist conducts his business the year round so that he has a fairly steady income.

3. There is a chance for experimentation and an opportunity to learn many new things. This makes the work very interesting.

4. He works with beautiful growing things. The surroundings are pleasant.

5. The work is not heavy. For this reason, there is an opening for women in this field.

6. A person interested in this work may start on a small scale as a neighborhood florist and later enlarge his business.

7. The work provides for fresh air and healthful exercise. The new problems keep him mentally alert. A successful florist has the same social standing as any prosperous business man.

8. The worker has a chance to express his own ideas in the arrangement of flowers.

*9. The florist is usually located near enough the city to take advantage of opportunities offered both for recreation and business contacts.

*10. There are flower organizations where the florist may meet others in the same work and learn the latest and best methods of production and display.

11. The greatest disadvantage is the great chance of loss. Sudden changes in temperature will spoil the flowers. Plant diseases and insect pests may cause loss. Flowers are perishable. If not sold within a short time, the florist will lose money.

12. A greenhouse represents a large investment of money.

13. There are rush seasons, particularly at holidays and special occasions, when it is necessary to work day and night to fill orders. There are dull seasons, too, when income is low.

14. The florist must be prepared to work at any hour of the day or night.

15. Flowers are a luxury. When times are hard, the florist is one of the first to suffer a loss in income.

16. There is keen competition among florists.

Training

1. Many florists who are now successful started with a small garden under glass. Helping a florist or nurseryman

9. The florist is usually located near enough the city to take advantage of opportunities offered both for recreation and business contacts.

10. There are flower organizations where the florist may meet others in the same work and learn the latest and best methods of production and display.

11. The greatest disadvantage is the great chance of loss. Sudden changes in temperature will spoil the flowers. Plant diseases and insect pests may cause loss. Flowers are perishable. If not sold within a short time, the florist will lose money.

12. A greenhouse represents a large investment of money.

13. There are rush seasons, particularly at holidays and special occasions, when it is necessary to work day and night to fill orders. There are dull seasons, too, when income is low.

14. The florist must be prepared to work at any hour of the day or night.

15. Flowers are a luxury. When times are hard, the florist is one of the first to suffer a loss in income.

16. There is keen competition among florists.

Training

1. Many florists who are now successful started with a small garden under glass. Helping a florist or nurseryman

is a good way to enter the field.

2. Courses in floriculture or related subjects are given at the agricultural college. The best training is gained at such a college.

3. In either case, the successful florist must continue to read and study in this field.

Financial Returns

1. The florist is usually able to get a fair income. The size of this income will depend upon (a) the size of his business; (b) the location and the type of the community he serves; (c) the variety of flowers that he raises or sells.

Abilities Needed

1. The florist must be willing to work long hours. He must be physically fit to do this often.

2. He must have courage when losses come.

3. A pleasing personality and a reputation for honest dealings are important attributes.

*4. The successful florist is alert to new scientific facts and suggestions.

5. Since he will need several assistants, he must be able to direct others.

6. Promptness in delivering flowers is absolutely necessary.

7. The florist must have a love for growing things.

is a good way to enter the field.

2. Courses in floriculture or related subjects are given at the agricultural college. The best training is gained at such a college.

3. In either case, the successful florist must continue to read and study in this field.

Financial Returns

1. The florist is usually able to get a fair income. The size of this income will depend upon (a) the size of his business; (b) the location and the type of the community he serves; (c) the variety of flowers that he raises or sells.

Abilities Needed

1. The florist must be willing to work long hours. He must be physically fit to do this often.

2. He must have courage when losses come.

3. A pleasing personality and a reputation for honest dealings are important attributes.

4. The successful florist is alert to new scientific facts and suggestions.

5. Since he will need several assistants, he must be able to direct others.

6. Promptness in delivering flowers is absolutely necessary.

7. The florist must have a love for growing things.

8. Artistic ability is needed in the arranging of bouquets and floral decorations.

9. Accuracy in keeping accounts is necessary if he wishes to succeed.

10. To make a success of this enterprise, the florist must be intelligent and ambitious to improve in his work.

11. There are many details to be considered. This requires good management of time and money.

12. He must have the ability to plan ahead.

Unit Assignment

(Approximate time allotment - six periods)

This unit assignment is designed for group work. The group will number approximately six or eight pupils.

Introductory Activity: A Visit to the Florist

Since practically every neighborhood has a florist shop and greenhouse of some size, arrangement should be made to have the group or representative visit the greenhouse.

Pictures of the florist's work that can be passed around to the committee will help to make the study more concrete.

(SG-1) Organize your group. Select a chairman who will assign the work to individuals. A secretary will keep notes during discussions. All must co-operate in order to do the group work successfully.

8. Artistic ability is needed in the arranging of bouquets and floral decorations.

9. Accuracy in keeping accounts is necessary if he wishes to succeed.

10. To make a success of this enterprise, the florist must be intelligent and ambitious to improve in his work.

11. There are many details to be considered. This requires good management of time and money.

12. He must have the ability to plan ahead.

Unit Assignment

(Approximate time allotment - six periods)

This unit assignment is designed for group work. The group will number approximately six or eight pupils.

Introductory Activity: A Visit to the Florist

Since practically every neighborhood has a florist shop and greenhouse of some size, arrangement should be made to have the group or representative visit the greenhouse.

Figures of the florist's work that can be passed around to the committee will help to make the study more concrete.

(Co-1) Organize your group. Select a chairman who will assign the work to individuals. A secretary will keep notes during discussions. All must co-operate in order to do the group work successfully.

Service to Others

(SG-2) Make a list of all the reasons why your friends buy flowers. Where have you seen beautiful cut flowers? On what occasions or holidays? What is the florist's slogan? What thoughts may we express through flowers? (2) pp. 3-4.

Required Tasks

(SG-3) What are some of the daily duties of the florist? What equipment does he use? What are some of his occasional duties? What must the florist take into consideration when planning his greenhouse? (1) p. 77; (2) pp. 6-11; (4) p. 64; (6) p. 20; (7) p. 98; (8) p. 250; (9) pp. 61-62; (10) pp. 5-13, 14.

(*SG-4) Make a complete list of the duties of the florist.

Advantages and Disadvantages

(SG-5) What advantages in the florist work would appeal to an artistic person? to the person who is interested in meeting people? to the person who likes to experiment? to the business man? What advantages do you think are most desirable? (9) p. 61; (10) pp. 1-2; (2) pp. 18-19.

(SG-6) Mr. Smith is looking forward to a busy season at Easter. His greenhouse is well stocked with plants that will open fully at Easter time. What could happen to spoil Mr. Smith's plans for a profitable season? What other disadvantages do you find in this work? (1) p. 77; (10) p. 2; (2) p. 19.

Service to Others

(80-2) Make a list of all the reasons why your friends buy flowers. Where have you seen beautiful cut flowers? On what occasions or holidays? What is the florist's slogan? What thoughts may we express through flowers? (2) pp. 3-4.

Required Tasks

(80-3) What are some of the daily duties of the florist? What equipment does he use? What are some of his occasional duties? What must the florist take into consideration when planning his greenhouse? (1) p. 77; (3) pp. 6-11; (4) p. 64; (6) p. 20; (7) p. 98; (8) p. 250; (9) pp. 61-62; (10) pp. 5-13, 14.

(*80-4) Make a complete list of the duties of the florist.

Advantages and Disadvantages

(80-5) What advantages in the florist work would appeal to an artistic person? to the person who is interested in meeting people? to the person who likes to experiment? to the business man? What advantages do you think are most desirable? (9) p. 61; (10) pp. 1-3; (3) pp. 18-19.

(80-6) Mr. Smith is looking forward to a busy season at Easter. His greenhouse is well stocked with plants that will open fully at Easter time. What could happen to upset Mr. Smith's plans for a profitable season? What other disadvantages do you find in this work? (1) p. 77; (10) p. 2; (9) p. 19.

Training

(Sg-7) Ask a florist friend how he happened to go into the business. How did he learn? What do you think is the best way to learn the service of raising flowers to sell? (1) p. 76; (9) p. 62; (10) pp. 3-4; (2) pp. 13-16.

Financial Returns

(SG-8) What are some conditions upon which a florist's income depends? Why must cut flowers be sold at a high price? (2) p. 17; (4) p. 75; (9) p. 62.

Abilities Needed

(SG-9) Review your list of florist duties. Beside each duty list an ability that the florist should have. For example:

Task He must plant flowers so that they will be in full blossom at a particular season.

Ability He must have the ability to plan ahead.

Task He delivers flowers.

Ability He must be able to plan his time so that the flowers will be delivered promptly. (2) pp. 11-13; (1) pp. 76-78; (4) pp. 75-76; (10) p. 3; (9) p. 62.

(SG-10) As soon as you have gathered the information, put it together in the form of a notebook and hand it to your teacher.

(SG-11) The next step is to choose one or more optional

Training

(Se-7) Ask a florist friend how he happened to go into the business. How did he learn? What do you think is the best way to learn the service of selling flowers to sell? (1) p. 76; (2) p. 82; (10) pp. 5-6; (9) pp. 18-19.

Financial Returns

(Sc-6) What are some conditions upon which a florist's income depends? Why must cut flowers be sold at a high price? (2) p. 17; (4) p. 75; (8) p. 92.

Abilities needed

(Sc-9) Devise your list of florist duties. Beside each duty list an ability that the florist should have. For example:

Task: He must plant flowers so that they will be in full blossom at a particular season.

Ability: He must have the ability to plan ahead.

Task: He delivers flowers.

Ability: He must be able to plan his time so that the flowers will be delivered promptly. (2) pp. 11-13; (1) pp. 76-78; (4) pp. 75-76; (10) p. 5; (4) p. 92.

(Sc-10) As soon as you have gathered the information, put it together in the form of a notebook and hand it to your teacher.

(Sc-11) The next step is to choose one or more optional

activities which will prove of interest to the class as well as to yourself.

References

1. Hoerle, Helen Christine and Saltzberg, The Girl and Her Job, Henry Holt and Co., New York, N. Y., 1926.

2. Success Pamphlet, Monograph on The Florist, Vocational Information Series, Directed by Chlros Shade, Morgan-Dillon, Publishers, Chicago, Ill., 1937.

3. Holbrook, Harold Lyman and MacGregor, A. Laura, Our World of Work, Allyn and Bacon, Boston, Mass., 1929.

4. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

5. Edmonson, James B. and Dondineau, Arthur, Vocations Through Problems, MacMillan Co., New York, N. Y., 1937.

6. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

7. Zeigler, Samuel H. and Jacquette, Helen, Choosing An Occupation, John P. Winston Co., Philadelphia, Pa., 1924.

8. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

9. Davis, Frank G. and Davis, B. Carnall, Guidance for Youth, Ginn and Co., Boston, Mass., 1928.

10. Career Monograph, Horticulture as a Career, The Institute for Research, Chicago, Ill., 1930.

Note: Many books do not mention the florist but offer information that could well apply to this occupation. Use such books in your study.

Optional Activities

1. Make a plan of a greenhouse showing (a) the heating system; (b) the watering system; (c) the flower beds; and

activities which will prove of interest to the class as well as to yourself.

References

1. Koenig, Helen Christine and Baltzberg, The Girl and Her Job, Henry Holt and Co., New York, N. Y., 1928.

2. Success Pamphlet, Monograph on The Florist, Vocational Information Series, Directed by Shirley Shade, Morgan-Dillon, Publishers, Chicago, Ill., 1927.

3. Holbrook, Harold Lyman and Hallenbeck, A. Lance, Our World of Work, Allyn and Bacon, Boston, Mass., 1929.

4. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

5. Simonson, James B. and Dondineau, Arthur, Vocations Through Problems, Macmillan Co., New York, N. Y., 1927.

6. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

7. Zeigler, Samuel H. and Jacquette, Helen, Choosing an Occupation, John F. Winston Co., Philadelphia, Pa., 1928.

8. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1930.

9. Davis, Frank G. and Davis, G. Gannett, Guidance for Youth, Ginn and Co., Boston, Mass., 1928.

10. Farmer Monograph, Horticulture as a Career, The Institute for Research, Chicago, Ill., 1930.

Note: Many books do not mention the florist but offer information that could well apply to this occupation. Use such books in your study.

Optional Activities

1. Make a plan of a greenhouse showing (a) the heating system; (b) the watering system; (c) the flower beds; and

(d) the other sections.

2. Make a list of the orders which a florist may have to fill. What are some things he must know in order to fill these orders?

3. Make a poster which points out the service which a florist renders.

4. Make a series of simple drawings showing the work of the florist.

5. Plan a small booklet entitled "How to Become a Florist" that could be given to those interested in a florist career. Make it very complete.

6. What magazines would you find helpful as a florist? Bring a sample to class if possible.

7. A florist exhibit would help your class to understand about this worker. Perhaps the librarian would help you to arrange this exhibit.

8. Many women have made a success of the florist business. Look up the story of one of these successful people.

9. Have you a favorite poem about flowers? Choose a beautiful poem to include in your notebook and read to the class.

10. Write a play which will show some of the problems which a florist must meet. Try to picture the many tasks which a florist must do.

(d) the other sections.

2. Make a list of the orders which a florist may have to fill. What are some things he must know in order to fill these orders?

3. Make a poster which points out the services which a florist renders.

4. Make a series of simple drawings showing the work of the florist.

5. Plan a small booklet entitled "How to Become a Florist" that could be given to those interested in a florist career. Make it very complete.

6. What magazines would you find helpful as a florist? Bring a sample to class if possible.

7. A florist exhibit would help your class to understand about this worker. Perhaps the librarian would help you to arrange this exhibit.

8. Many women have made a success of the florist business. Look up the story of one of these successful people.

9. Have you a favorite poem about flowers? Choose a beautiful poem to include in your notebook and read to the class.

10. Write a play which will show some of the problems which a florist must meet. Try to picture the many tasks which a florist must do.

11. Have you ever visited a flower show? Why are flower shows held? Why not suggest a flower show at school? Some schools have very successful and worthwhile flower shows. What plans would have to be made?

Class Presentation Period

1. The group will plan to present the important concepts of this unit through pictures, floor talks, and group discussions.

2. The presentation will depend, in part, upon the optional activities undertaken by the group.

Test

The test will be given only to those who have studied the florist.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The florists' slogan "Say it with flowers" means 1.....

a) letters are not as necessary today as formerly.
b) be sure to attach your letter to a bouquet.
c) send flowers to express sympathy, cheer, congratulations, and other sentiments.
d) use the Florist Telegraph Service.

Flowers are usually high in price because 2.....

a) people expect to pay a high price for flowers.
b) the cost of keeping flowers fresh is great.
c) each flower represents many hours of high-priced labor.
d) the flowers fade so quickly that there is great loss.

11. Have you ever visited a flower show? Why are flower shows held? Why not suggest a flower show at school? Some schools have very successful and worthwhile flower shows. What plans would have to be made?

Class Presentation Period

1. The group will plan to present the important concepts of this unit through pictures, floor talks, and group discussions.

2. The presentation will depend, in part, upon the optional activities undertaken by the group.

Test

The test will be given only to those who have studied the florist.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The florists' slogan "Say it with flowers" means 1.....

a) letters are not as necessary today as formerly.
b) be sure to attach your letter to a bouquet.
c) send flowers to express sympathy, cheer, congratulations, and other sentiments.
d) use the Florist Telegraph Service.

Flowers are usually high in price because 2.....

a) people expect to pay a high price for flowers.
b) the cost of keeping flowers fresh is great.
c) each flower represents many hours of high-priced labor.
d) the flowers fade so quickly that there is great loss.

*In this country the flower growers 3.....

a) raise flowers to make perfume in large quantities.
b) raise few flowers for perfume.
c) raise more flowers for perfume than France or Bulgaria.
d) supply great quantities for perfume manufacture abroad.

*The florist needs to select a location rather near centers of population because 4.....

a) people do not like to walk very far.
b) flowers are perishable and must be delivered within a reasonable time.
c) telegraph service must be available.
d) he needs a very large area for his garden.

To fight insect pests, the florist does 5.....

a) pruning.
b) grafting.
c) spraying.
d) rooting.

Most florists attract customers 6.....

a) by announcing low prices.
b) by giving a bonus with purchases over a certain amount.
c) by paying flower vendors to display the flowers at the street corners.
d) by attractive window and flower case displays.

The work of flower culture is interesting to one who is scientific because 7.....

a) there is a chance to meet people.
b) the accounts must be accurate.
c) the work is not too heavy.
d) there is a chance for experimenting with plants and flowers.

More women are engaged in raising flowers than in some other agricultural work because 8.....

a) women like flowers more than men.
b) the work is not too heavy for women.
c) women find it more interesting.
d) women are more likely to have good selling ability.

The type of person who would most enjoy selling flowers is 9.....

a) one who is artistic in arranging flowers.
b) one who is interested in cost accounting on a large scale.
c) one who likes to watch plants grow.
d) one who enjoys "high pressure" salesmanship.

*The successful florist must be mentally alert because 10.....

a) there are so many people ready to cheat in the business.
b) he has many problems to solve in the planning, selection, cultivation, and sale of flowers.
c) he must throw faded flowers away.
d) he does the same things day after day.

The greatest disadvantage of the florist's work is 11.....

a) people do not appreciate all the work that must be done in flower culture.
b) florists must be out in all kinds of weather.
c) there is great expense in the delivery of flowers.
d) conditions over which he has no control may cause serious loss.

The florist should be a person of good health because 12.....

a) the work is extremely heavy.
b) there are rush seasons where long hours of work are required.
c) there are some seasons when business is dull.
d) the florist must find time for advanced reading and study.

More women are engaged in raising flowers than in some other agricultural work because 8.....

a) women like flowers more than men.
b) the work is not too heavy for women.
c) women find it more interesting.
d) women are more likely to have good selling ability.

The type of person who would most enjoy selling flowers is 9.....

a) one who is artistic in arranging flowers.
b) one who is interested in cost accounting on a large scale.
c) one who likes to watch plants grow.
d) one who enjoys "high pressure" salesmanship.

The successful florist must be mentally alert because 10.....

a) there are so many people ready to cheat in the business.
b) he has many problems to solve in the planning, selection, cultivation, and sale of flowers.
c) he must throw faded flowers away.
d) he does the same things day after day.

The greatest disadvantage of the florist's work is 11.....

a) people do not appreciate all the work that must be done in flower culture.
b) florists must be out in all kinds of weather.
c) there is great expense in the delivery of flowers.
d) conditions over which he has no control may cause serious loss.

The florist should be a person of good health because 12.....

a) the work is extremely heavy.
b) there are rush seasons where long hours of work are required.
c) there are some seasons when business is dull.
d) the florist must find time for reading and study.

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The florist raises plants and flowers to be (1). 1.....

He provides material for the (2) of homes, churches, and other places. The florist makes it possible to express our (3) and congratulations. 2.....

3.....

The florist offers us the (4) of prompt delivery. An order for flowers may now be (5) to distant places at a reasonable rate. 4.....

5.....

The young florist should select a location (6) near the city. 6.....

The florist must make his (7) many months before the flowers are to be sold. 7.....

He must provide a (8) with equipment for (9) and watering. 8.....

9.....

The branch of agriculture that has to do with flowers is known as (10). 10.....

The florist is often requested to give (11) about flowers. 11.....

1. telegraphed	8. distant from	15. plans
2. luxury	9. decorations	16. heating
3. sold	10. greenhouse	17. distress
4. arrangement	11. planted	18. display
5. convenience	12. sympathy	19. fairly near
6. information	13. floriculture	20. sunporch
7. questions	14. forestry	

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The florist raises plants and flowers to be (1). 1.....

He provides material for the (2) of homes, churches, and other places. 2.....

The florist makes it possible to express our (3) and congratulations. 3.....

The florist offers us the (4) of prompt delivery. 4.....

An order for flowers may now be (5) to distant places at a reasonable rate. 5.....

The young florist should select a location (6) near the city. 6.....

The florist must make his (7) many months before the flowers are to be sold. 7.....

He must provide a (8) with equipment for (9) and watering. 8.....

9.....

The branch of agriculture that has to do with flowers is known as (10). 10.....

The florist is often requested to give (11) about flowers. 11.....

1. selectedbed	8. distant from	15. plans
2. luxury	9. decorations	16. heating
3. sold	10. greenhouse	17. distress
4. arrangement	11. planted	18. display
5. convenience	12. sympathy	19. fairly near
6. information	13. floriculture	20. supposed
7. questions	14. forestry	

The florist must (12) his seeds and 12.....
bulbs carefully. He keeps the soil rich by 13.....
supplying plenty of (13). 14.....

Routine work includes (14), (15), 15.....
(16), and watering. He must regulate the 16.....
heat so that an even (17) is maintained. 17.....

The florist must be prepared to (18) 18.....
the insect and plant pests.

The florist cuts the (19) at just the 19.....
right time. If plants are to be sold, they
are placed in (20). The packing of flowers 20.....
for delivery must be done very (21). 21.....

The florist must be able to make (22) 22.....
and to arrange attractive (23), and (24). 23.....
He must be ready to meet (25) demands for 24.....
certain flowers. 25.....

The only way a florist can know how his
business stands is to keep (26) accounts. 26.....

1. temperature
2. carefully
3. select
4. blossoms
5. transplanting
6. corsages
7. seasonal
8. haphazard
9. spraying
10. quickly
11. fight
12. bouquets
13. fertilizer
14. cultivate
15. accurate
16. very unusual
17. roots
18. weeding
19. floral designs
20. pots
21. ventilation
22. grafting
23. sifting
24. boxes

The florist must (12) his seeds and bulbs carefully. He keeps the soil rich by supplying plenty of (13).

Routine work includes (14), (15), (16), and watering. He must regulate the heat so that an even (17) is maintained.

The florist must be prepared to (18) the insect and plant pests.

The florist cuts the (19) at just the right time. If plants are to be sold, they are placed in (20). The packing of flowers for delivery must be done very (21).

The florist must be able to make (22) and to arrange attractive (23), and (24). He must be ready to meet (25) demands for certain flowers.

The only way a florist can know how his business stands is to keep (26) accounts.

1. temperature
2. carefully
3. select
4. bloscoms
5. transplanting
6. corsages
7. seasonal
8. inexpensive
9. spraying
10. quickly
11. light
12. bulbs
13. fertilizer
14. cultivate
15. accurate
16. very unusual
17. roots
18. weeding
19. floral designs
20. pots
21. ventilation
22. grafting
23. gifting
24. boxes

CHAPTER VIII

THE LANDSCAPE GARDENER

The Unit

The landscape gardener is an artist in the planning, selection, arrangement, and cultivation of flowers, plants, shrubs, and trees. To this worker we owe the beauty of our public gardens and parks, both large and small, as well as the loveliness of the private gardens of the more wealthy. Knowledge of horticultural science, an understanding of the principles of color, light, balance, and harmony in planning a given area, and skill in the care and arrangement of plants are required. The landscape gardener may work under the direction of the landscape architect or he may work independently. Sometimes he combines his work with that of the nurseryman. The increased interest of individuals and communities in well-planned outdoor surroundings and the growing opportunities for public outdoor recreation should mean a greater demand for the services of the landscape gardener.

(Approximate time allotment - six periods)

CHAPTER VIII

THE LANDSCAPE GARDENER

The Unit

The landscape gardener is an artist in the planning, selection, arrangement, and cultivation of flowers, plants, shrubs, and trees. To this worker we owe the beauty of our public gardens and parks, both large and small, as well as the lovelinness of the private gardens of the more wealthy. Knowledge of horticultural science, an understanding of the principles of color, light, balance, and harmony in planning a given area, and skill in the care and arrangement of plants are required. The landscape gardener may work under the direction of the landscape architect or he may work independently. Sometimes he combines his work with that of the nurseryman. The increased interest of individuals and communities in well-planned outdoor surroundings and the growing opportunities for public outdoor recreation should mean a greater demand for the services of the landscape gardener.

(Approximate time allotment - six periods)

The Delimitation

Service to Others

1. The landscape gardener helps to make our country more beautiful. Through careful planning, he adds beauty and loveliness to our national, state and city parks, roadsides, and public gardens.

2. Through the work of the landscape gardener, people live in more beautiful cities and communities. These people are more happy and contented, as well as more healthy.

3. The landscape gardener provides well planned recreation grounds, sometimes in the city, near schools, buildings, and also in playgrounds, parks, forest preserves, and golf grounds.

*4. The landscape gardener often preserves for us beauties of nature that might otherwise be lost. For example, he may plant trees on hilly land that would otherwise be washed away; or he may cut away growth so that what was once a muddy stream may become a clear flowing brook which people may stop to admire and enjoy.

5. He teaches love of nature through giving opportunity to enjoy nature.

Required Tasks

1. The scope of the landscape gardener's work will depend upon which of the following positions he holds: (a) employed by land architect; (b) independent landscape

The Delimitation

Service to Owners

1. The landscape gardener helps to make our country more beautiful. Through careful planning, he adds beauty and loveliness to our national, state and city parks, roadsides, and public gardens.

2. Through the work of the landscape gardener, people live in more beautiful cities and communities. These people are more happy and contented, as well as more healthy.

3. The landscape gardener provides well planned recreation grounds, sometimes in the city, near schools, buildings, and also in playgrounds, parks, forest preserves, and golf grounds.

4. The landscape gardener often preserves for us beauties of nature that might otherwise be lost. For example, he may plant trees on hilly land that would otherwise be washed away; or he may cut away growth so that what was once a muddy stream may become a clear flowing brook which people may stop to admire and enjoy.

5. He teaches love of nature through giving opportunity to enjoy nature.

Regarding Trade

1. The scope of the landscape gardener's work will depend upon which of the following positions he holds: (a) employed by land architect; (b) independent landscape

gardening; (c) employed by individual or concern.

*2. The landscape gardener must study the area which he is to beautify, noting such points as general landscape, buildings, type of soil, level and hilly sections, layout of streets and roads, and the location of woodland, lake or stream.

3. He must consider the whole picture as he makes his plans for planting trees, shrubs, and gardens.

4. When the professional landscape architect is employed, the landscape gardener carries out the plans already laid down. In cases where he works alone, his work may include recommendations and arrangements for roads, bridges, walls, trails, trellis work, benches, as well as the actual planting of trees and gardens. If he is connected with a nursery, he may raise some of the stock he uses in the gardening.

5. The landscape gardener usually draws a rough sketch of his plans.

6. The landscape gardener must supervise or actually do the work of fertilizing the soil, grading the land, seeding, rolling, and edging lawns, and the selecting of appropriate trees, shrubs, and plants.

7. He must plant at the proper time, keeping in mind the plans for color, shade, shrub arrangement, and garden walks, so that the final effect will meet with approval. He

gardening; (c) employed by individual or concern.

2. The landscape gardener must study the area which he is to beautify, noting such points as general landscape, buildings, type of soil, level and hilly sections, layout of streets and roads, and the location of woodland, lake or stream.

3. He must consider the whole picture as he makes his plans for planting trees, shrubs, and gardens.

4. When the professional landscape architect is employed, the landscape gardener carries out the plans already laid down. In cases where he works alone, his work may include recommendations and arrangements for roads, bridges, walls, trellis, trellis work, benches, as well as the actual planting of trees and gardens. If he is connected with a nursery, he may raise some of the stock he uses in the gardening.

5. The landscape gardener usually draws a rough sketch of his plans.

6. The landscape gardener must supervise or actually do the work of fertilizing the soil, grading the land, seeding, rolling, and edging lawns, and the selecting of appropriate trees, shrubs, and plants.

7. He must plant at the proper time, keeping in mind the plans for color, shade, shrub arrangement, and garden walks, so that the final effect will meet with approval. He

must remember that growth is slow and plan accordingly.

8. The trees and shrubs must be pruned and trimmed.

9. He must cultivate the gardens - throwing away the faded flowers, transplanting when necessary, and spraying flowers and trees.

*10. Sometimes he must supervise the building of walks, walls, fountains, pools, and garden ornaments.

11. He must understand and be able to arrange and plant such gardens as: rock gardens, hillside gardens, park areas along rivers, lakes and streams, and roadside gardens. Wall gardens, formal gardens, water gardens, color gardens, marsh gardens, experimental gardens, gardens along rocky steps, cemetery plots, and gardens in floral designs such as clocks, flags, steps, and other figures, are all within his program of work.

12. The landscape gardener who is responsible for the continued care of gardens as well as the planning and planting may direct the work of gardeners.

13. Many times the landscape gardener finds he must cut down trees and uproot shrubs to get the effects he desires.

14. The landscape gardener must keep accurate account of labor and stock costs. He must make careful estimates.

15. He must spend some time in reading and study.

must remember that growth is slow and plan accordingly.

8. The trees and shrubs must be pruned and trimmed.

9. He must cultivate the gardens - throwing away the faded flowers, transplanting when necessary, and spraying flowers and trees.

10. Sometimes he must supervise the building of walks, walls, fountains, pools, and garden ornaments.

11. He must understand and be able to arrange and plant such gardens as: rock gardens, hillside gardens, gardens across along rivers, lakes and streams, and roadside gardens, hall gardens, formal gardens, water gardens, color gardens, marsh gardens, experimental gardens, gardens along rocky steps, cemetery plots, and gardens in floral designs such as clocks, flags, steps, and other figures, are all within his program of work.

12. The landscape gardener who is responsible for the continual care of gardens as well as the planning and planting may direct the work of gardeners.

13. Many times the landscape gardener finds he must cut down trees and uproot shrubs to get the effects he desires.

14. The landscape gardener must keep accurate account of labor and stock costs. He must make careful estimates.

15. He must spend some time in reading and study.

Advantages and Disadvantages

1. The work brings beauty and joy into the lives of people.

2. It is a growing occupation for opportunities are increasing.

3. He works with growing and beautiful things.

4. Much of the work is out-of-doors. There is much healthful exercise in fresh air and sunshine.

5. The work is not monotonous, but has endless variety. He creates beautiful effects and the work is lasting.

6. He has an opportunity to learn new things daily through experience and study. The income is fair.

7. There are leisure periods in winter.

8. There are numerous horticultural organizations and garden clubs to which he may belong.

9. He may become a landscape architect.

10. On the other hand, the landscape gardener's work is not a necessity. In times of depression, he has little work.

11. The landscape gardener still has much heavy manual work. The hours are long at times.

12. Final fulfillment of his plans takes several years. In the meantime, his plans may be upset by conditions over which he has no control, such as weather, changing temperatures, hard times, insect pests, and plant diseases, and

Advantages and Disadvantages

1. The work brings beauty and joy into the lives of people.

2. It is a growing occupation for opportunities are increasing.

3. He works with growing and beautiful things.

4. Much of the work is out-of-doors. There is much healthful exercise in fresh air and sunshine.

5. The work is not monotonous, but has endless variety. He creates beautiful effects and the work is lasting.

6. He has an opportunity to learn new things daily through experience and study. The income is fair.

7. There are leisure periods in winter.

8. There are numerous horticultural organizations and garden clubs to which he may belong.

9. He may become a landscape architect.

10. On the other hand, the landscape gardener's work is not a necessity. In times of depression, he has little work.

11. The landscape gardener still has much heavy manual work. The hours are long at times.

12. Final fulfillment of his plans takes several years. In the meantime, his plans may be upset by conditions over which he has no control, such as weather, changing temperatures, hard times, insect pests, and plant diseases, and

in cases of public parks and forest reservations, there is the fire hazard. Some of the people who use such public areas are careless and destructive.

13. The landscape gardener has rush seasons. At such seasons, too many demands are made upon his time. He has dull seasons, too, when income is low, unless he is permanently employed at a regular salary.

*14. When under private contract, the landscape gardener may have to re-seed or replace plants that have proved unsatisfactory, even though it may not be his fault.

Training

1. The landscape gardener may learn much through experience in gardening.

2. The most desirable training is a four year course in an agricultural college with special work in landscape gardening and floriculture.

3. This worker must spend much time in reading and study. Membership in horticultural organizations and garden clubs offers an opportunity to meet other workers in this field.

Financial Returns

The income will depend upon several factors:

1. If the landscape gardener works under the direction of a landscape architect, his income will depend upon type of work and hours of labor.

In cases of public parks and forest reservations, there is the fire hazard. Some of the people who use such public areas are careless and destructive.

10. The landscape gardener has rush seasons. At such seasons, too many demands are made upon his time. He has dull seasons, too, when income is low, unless he is permanently employed at a regular salary.

11. When under private contract, the landscape gardener may have to re-seed or replace plants that have proved unsatisfactory, even though it may not be his fault.

Training

1. The landscape gardener may learn much through experience in gardening.

2. The most desirable training is a four year course in an agricultural college with special work in landscape gardening and floriculture.

3. This worker must spend much time in reading and study. Membership in horticultural organizations and garden clubs offers an opportunity to meet other workers in this field.

Financial Returns

The income will depend upon several factors:

1. If the landscape gardener works under the direction of a landscape architect, his income will depend upon type of work and hours of labor.

2. If he is employed by public or private institution, park commission, or other group, his income will be steady but only fair. One report states that landscape gardeners receive about eighty dollars a month with maintenance.[1/]

3. If the landscape gardener is independent, or is affiliated with a nursery, he may receive a certain per cent of the amount of the contract, and in dull seasons help in the nursery. This means a more regular income.

Abilities Needed

1. The landscape gardener should have the ability to arrange trees, shrubs, plants, and flowers artistically, with reference to color, harmony, light, and balance in arrangements.

2. He must be able to select the proper plants for a given setting or landscape.

3. He must have creative ability.

4. He should be able to plan ahead and through imagination, construct in his mind, a picture of the finished effects.

5. He should be able to face losses and discouragement.

*6. He should be able to find his greatest compensation in the creation of beautiful gardens, the opportunity to work with growing things, and the happiness which he gives

1/ Research Monograph No. 21, "Horticulture as a Career", The Institute for Research, Chicago, Ill.

2. If he is employed by public or private institution, park commission, or other group, his income will be steady but only fair. One report states that landscape gardeners receive about eighty dollars a month with maintenance.[1]

3. If the landscape gardener is independent, or is affiliated with a nursery, he may receive a certain per cent of the amount of the contract, and in dull seasons help in the nursery. This means a more regular income.

Abilities Needed

1. The landscape gardener should have the ability to arrange trees, shrubs, plants, and flowers artistically, with reference to color, harmony, light, and balance in arrangements.

2. He must be able to select the proper plants for a given setting or landscape.

3. He must have creative ability.

4. He should be able to plan ahead and through imagination, construct in his mind, a picture of the finished effects.

5. He should be able to face losses and discouragements.

6. He should be able to find his greatest compensation in the creation of beautiful gardens, the opportunity to work with growing things, and the happiness which he gives

[1] Research Monograph No. 21. "Horticulture as a Career", The Institute for Research, Chicago, Ill.

others, rather than in the yearly income which he earns.

7. He must have the ability to do physical work. This requires a strong and vigorous physique.

8. The many and varied problems require mental ability of high order.

9. The landscape gardener must be able to sell his services to a prospective customer.

10. He must build up a reputation for honesty in standards of work and contracts.

11. He must be able to direct others so that plans will reach fulfillment.

*12. The landscape gardener must be able to acquire a fund of scientifically correct information and to apply it to the actual cultivation of plants under varied conditions.

13. He should be able to follow plans and designs set forth by the landscape architects.

14. He must have the ability to get along with people for his work must meet the approval of others.

Unit Assignment

(Approximate time allotment - six periods)

This unit is planned for group work. The group will number six to eight pupils, all of whom have selected the top voluntarily.

(SG-1) Organize your group. Select a chairman and a

others, rather than in the yearly income which he earns.

7. He must have the ability to do physical work. This requires a strong and vigorous physique.

8. The many and varied problems require mental ability of high order.

9. The landscape gardener must be able to sell his services to a prospective customer.

10. He must build up a reputation for honesty in standards of work and contracts.

11. He must be able to direct others so that plans will reach fulfillment.

12. The landscape gardener must be able to acquire a fund of scientifically correct information and to apply it to the actual cultivation of plants under varied conditions.

13. He should be able to follow plans and designs set forth by the landscape architects.

14. He must have the ability to get along with people for his work must meet the approval of others.

Unit Assignment

(Approximate time allotment - six periods)

This unit is planned for group work. The group will number six to eight pupils, all of whom have selected the top voluntarily.

(30-1) Organize your group. Select a chairman and a

secretary. The chairman will lead the discussions and assign problems. The secretary will keep a record of all discussions and assignments. It will be necessary that all cooperate if the work is to be done well.

(The term landscape gardener is less familiar to boys and girls than many of the other agricultural occupations. For this reason, the teacher must give special attention to this group, checking the findings of this group, so that erroneous concepts may be replaced by correct ideas.)

Discussion on the following questions with the group will help: "When you visited the park you saw some very striking gardens. What were they like?" (If not mentioned, point out the rose gardens with the trellises, the tulip gardens in various colors, the rock garden with the reflecting pool and artificial waterfall, the Dutch gardens with canals and bridges.) "What do we call the man who plans these gardens? What do we call the man who supervises the carrying out of these plans?" You will find in your reading some interchanging of the (1) landscape architect and (2) landscape gardener. Except where the area to be landscaped is very large, or in cases where money does not have to be considered, the landscape gardener may be called on to make the plans and see that they are carried out.

(A series of pictures of various kinds of gardens will help pupils to visualize the work done by the landscape

secretary. The chairman will lead the discussions and assign problems. The secretary will keep a record of all discussions and assignments. It will be necessary that all cooperate if the work is to be done well.

(The term landscape gardener is less familiar to boys and girls than many of the other agricultural occupations. For this reason, the teacher must give special attention to this group, checking the findings of this group, so that erroneous concepts may be replaced by correct ideas.)

Discussion on the following questions with the group will help: "When you visited the park you saw some very attractive gardens. What were they like?" (If not mentioned, point out the rose gardens with the trellises, the tulip gardens in various colors, the rock garden with the reflecting pool and artificial waterfall, the Dutch gardens with canals and bridges.) "What do we call the man who plans these gardens? What do we call the man who supervises the carrying out of these plans?" You will find in your reading some interchanging of the (1) landscape architect and (3) landscape gardener. Except where the area to be landscaped is very large, or in cases where money does not have to be considered, the landscape gardener may be called on to make the plans and see that they are carried out.

(A series of pictures of various kinds of gardens will help pupils to visualize the work done by the landscape

gardener. Nursery catalogs and garden magazines are replete with illustrations.)

Service to Others

(SG-2) In what ways does the landscape gardener serve the community? *In what sense is he a "conservation worker"? *a nature teacher? (1); (3) p. 174.

Required Tasks

(SG-3) What is the relation of the landscape gardener to (a) the landscape architect, (b) the nurseryman, (c) the gardener? (1); (2); (6) p. 34.

(SG-4) The landscape gardener is not concerned with flowers only. What are some of the projects which he must undertake? What are some jobs he must supervise besides planting? (4) p. 22; (5) pp. 98-99; (9) pp. 64-65.

(*SG-5) What is meant by the sentence "The landscape gardener must study the whole landscape and plan accordingly" Give examples. (1); (2).

(SG-6) What are some of the tasks that a landscape gardener must do in (a) getting a golf course into shape; (b) beautifying a small park (with a lake); (c) making a number of special type gardens; (d) making the grounds of a new house attractive; (e) opening up a certain part of the woods to picnic parties; (f) caring for a park or large estate the year round?

(SG-7) How does a landscape gardener know how much to charge for his work? (1); (2).

gardener. Nursery catalogs and garden magazines are replete with illustrations.)

Service to Others

(30-5) In what ways does the landscape gardener serve the community? In what sense is he a "conservation worker" as nature teacher? (1); (3) p. 174.

Required Tasks

(30-6) What is the relation of the landscape gardener to (a) the landscape architect, (b) the nurseryman, (c) the gardener? (1); (2); (6) p. 34.

(30-4) The landscape gardener is not concerned with flowers only. What are some of the projects which he must undertake? What are some jobs he must supervise besides planting? (4) p. 22; (5) pp. 38-39; (9) pp. 64-65.

(30-5) What is meant by the sentence "The landscape gardener must study the whole landscape and plan accordingly" Give examples. (1); (2).

(30-6) What are some of the tasks that a landscape gardener must do in (a) getting a golf course into shape; (b) beautifying a small park (with a lake); (c) making a number of special type gardens; (d) making the grounds of a new house attractive; (e) opening up a certain part of the woods to picnic parties; (f) caring for a park or large estate the year round?

(30-7) How does a landscape gardener know how much to charge for his work? (1); (2).

(SG-8) What part of the landscape gardener's work will appeal most to you, the artistic or the scientific? List the advantages which you can see in this work. What features of the work do you think the landscape gardener would recommend? (6) p. 36.

(*SG-9) What are some conditions which may spoil the well laid plans of a landscape gardener? What season is the busiest? *What is meant by "replacement of stock"? Why do landscape gardeners hesitate to promise replacement? (1); (2); (6) p. 36.

(SG-10) How may a man learn this work? What is the best way? Why? In what way would membership in a horticultural club help him? (3) p. 175; (6) p. 35.

Financial Returns

(SG-11) How much may a landscape gardener expect to earn in a year? Why is it difficult to estimate a landscape gardener's income? (3) p. 176; (6) p. 36

Abilities Needed

(SG-12) The landscape gardener must have the ability to do many things, carry on work over a long period of time, and satisfy many people. What talents, abilities, and personal characteristics should he have to be particularly successful? Why? (1); (2); (3) p. 175; (6) pp. 34-35.

(SG-13) When your group has completed the work required on the study guide, write a report and hand it to

(34-9) What part of the landscape gardener's work will appeal most to you, the aesthetic or the scientific? List the advantages which you can see in this work. What features of this work do you think the landscape gardener would recommend? (6) p. 36.

(34-8) What are some conditions which may spoil the well laid plans of a landscape gardener? What season is the busiest? What is meant by "replacement of stock"? Why do landscape gardeners hesitate to practice replacement? (1); (2); (6) p. 36.

(34-10) How may a man learn his work? What is the best work? Why? In what way would membership in a horticultural club help him? (3) p. 178; (6) p. 35.

Financial Returns

(34-11) How much may a landscape gardener expect to earn in a year? Why is it difficult to estimate a landscape gardener's income? (3) p. 178; (6) p. 35

Qualities Needed

(34-12) The landscape gardener must have the ability to do many things, carry on work over a long period of time, and satisfy many people. What talents, abilities, and personal characteristics should he have to be particularly successful? Why? (1); (6); (3) p. 178; (6) pp. 34-35.

(34-13) When your group has completed the work required on the study guide, write a report and hand it to

your teacher. If it is acceptable, the group may decide on the optional activities to be undertaken. They are to be found in the card file.

References

1. Simonds, O. C., Landscape Gardening, MacMillan Co., New York, N. Y., 1920.

2. Coon, Nelson, Nursery Sales and Management, A. T. De La Mare Co., Inc., New York, N. Y., 1931.

3. Hoerle, Helen C. and Salzberg, Florence B., The Girl and Her Job, Henry Holt Co., New York, N. Y., 1926.

4. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

5. Zeigler, Samuel H. and Jacquette, Helen, Choosing An Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

6. Filene, Catharine, Careers for Women, Houghton Mifflin Co., New York, N. Y., 1934.

7. Platt, Rutherford, Book of Opportunities, G. Putnam and Sons, New York, N. Y., 1926.

8. Research Monograph No. 21, Horticulture As a Career, The Institute for Research, Chicago, Ill., 1931.

9. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

Note: Much of your information will come from books on general agriculture. There are few books that deal with the landscape gardener. Read any material that deals with the raising of flowers and shrubs, and apply that information to the landscape gardener's work. Consult the librarian for suggestions.

your teacher. If it is acceptable, the group may decide on the cultural activities to be undertaken. They are to be found in the card file.

References

1. Simonds, O. C., Landscape Gardening, MacMillan Co., New York, N. Y., 1920.

2. Cooper, Leisen, Industry Sales and Management, G. T. De La Mare Co., Inc., New York, N. Y., 1931.

3. Searle, Helen C. and Salzberg, Florence G., The Girl and Her Job, Henry Holt Co., New York, N. Y., 1926.

4. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1928.

5. Zeigler, Samuel R. and Jacquette, Helen, Choosing An Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

6. Filene, Catherine, Careers for Women, Houghton Mifflin Co., New York, N. Y., 1934.

7. Platt, Dunbar Ford, Book of Opportunities, D. Appleton and Sons, New York, N. Y., 1928.

8. Research Monograph No. 21, Hostelaures As a Career, The Institute for Research, Chicago, Ill., 1931.

9. Proctor, William Melvin, Vocations, Houghton Mifflin Co. New York, N. Y., 1929.

Note: Much of your information will come from books on general agriculture. There are few books that deal with the landscape gardener. Read any material that deals with the raising of flowers and shrubs, and apply that information to the landscape gardener's work. Consult the librarian for suggestions.

Optional Activities

1. Make a collection of pictures showing the various aspects of the landscape gardener's work. Mount the pictures, and on the back of each, paste a statement of the meaning of the picture. You may show these in the opaque projector during your group presentation period.

2. Make a series of simple drawings illustrating the landscape gardener's work.

3. Make a plan which a landscape gardener might use of the grounds surrounding a public library or a community club. The library and club are built some distance from the street with plenty of land. At present, the boys play ball on the club grounds while the land near the library is used as a parking lot.

4. Plan a landscape gardening exhibit. Perhaps a large box could be used to represent the land area. What part of the work could you represent in this way? Use your imagination and initiative.

5. Bring to class copies of books, magazines, and pictures of this work and put them on display. Label these so that your class will know what to note.

6. Make a notebook on the landscape gardener. Your teacher will be glad to put it on the reference shelf if it is worth while.

7. Pretend you are a landscape gardener speaking to a

Optional Activities

1. Make a collection of pictures showing the various aspects of the landscape gardener's work. Mount the pictures and on the back of each, paste a statement of the meaning of the picture. You may show these in the opaque projector during your group presentation period.

2. Make a series of simple drawings illustrating the landscape gardener's work.

3. Make a plan which a landscape gardener might use of the grounds surrounding a public library or a community club. The library and club are built some distance from the street with plenty of land. At present, the boys play ball on the club grounds while the land near the library is used as a parking lot.

4. Plan a landscape gardening exhibit. Perhaps a large box could be used to represent the land area. What part of the work could you represent in this way? Use your imagination and initiative.

5. Bring to class copies of books, magazines, and pictures of this work and put them on display. Label these so that your class will know what to note.

6. Make a notebook on the landscape gardener. Your teacher will be glad to put it on the reference shelf if it is worth while.

7. Pretend you are a landscape gardener speaking to a

group of interested high school boys. Write out the talk you would give to such a group. Stress particularly the opportunities for public service, the advantages, and the abilities you find are required.

8. Following your talk the boys ask questions. What are some of the questions that the boys might ask? Answer them.

9. The cartoonist often depicts a truth vividly. Draw a cartoon showing one disadvantage of the landscape gardener's business.

10. The landscape architect, the landscape gardener, the nurseryman, and the gardener have much in common. On a chart show the duties that are related or overlap.

11. Read an account of fine landscape gardens. Be ready to tell the class about them.

12. Do you know a landscape gardener? If so, ask him about his work. Report on your interview to the class.

13. Dramatize a conference of the landscape architect and a landscape gardener who is to carry out the plans.

14. Your report will not be complete without a report of government bulletins on this subject. Write for them.

Group Presentation Period

Each member of the group takes part in this presentation, setting forth the various aspects of the landscape

group of interested high school boys. Write out the talk you would give to such a group. Stress particularly the opportunities for public service, the advantages, and the qualities you feel are required.

6. Following your talk the boys ask questions. What are some of the questions that the boys might ask? Answer them.

7. The curbstone otter depicts a birth vivid. Draw a cartoon showing one disadvantage of the landscape gardener's business.

10. The landscape architect, the landscape gardener, the nurseryman, and the gardener have much in common. On a chart show the duties that are related or overlap.

11. Read an account of fine landscape gardens. Be ready to tell the class about them.

12. Do you know a landscape gardener? If so, ask him about his work. Report on your interview to the class.

13. Dramatize a conference of the landscape architect and a landscape gardener who is to carry out the plans.

14. Your report will not be complete without a report of government bulletins on this subject. Write for them.

Group Presentation Period

Each member of the group takes part in this presentation, setting forth the various aspects of the landscape

gardener's work.

The optional activities may be presented during this period. Opportunity for questions, class discussion, and constructive criticism should be given during this period.

Test

Only those pupils who have studied the landscape gardener will take the test.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The most important way in which the landscape gardener serves the people is 1.....

a) by planting trees and shrubs.
b) by cutting down unnecessary trees.
c) by planting trees and shrubs in such a way as to add beauty and harmony to the surroundings.
d) by giving information about trees.

One important reason why the opportunities of the landscape gardener are increasing is that 2.....

a) people have much more money to spend now than formerly.
b) people love nature more than ever before.
c) people know more about the science of gardening today.
d) people have more opportunity for public out door recreation.

gardener's work.

The optional activities may be presented during this period. Opportunity for questions, class discussion, and constructive criticism should be given during this period.

Test

Only those pupils who have studied the landscape gardener will take the test.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The most important way in which the landscape gardener serves the people is 1

a) by planting trees and shrubs.
b) by cutting down unnecessary trees.
c) by planting trees and shrubs in such a way as to add beauty and harmony to the surroundings.
d) by giving information about trees.

One important reason why the opportunities of the landscape gardener are increasing is that 2

a) people have much more money to spend now than formerly.
b) people love nature more than ever before.
c) people know more about the science of gardening today.
d) people have more opportunity for public out door recreation.

Mastery Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The landscape gardener helps to make our country more (1). 1.....

The landscape gardener gives people in cities and towns an opportunity to enjoy (2). 2.....

A landscape gardener may carry out plans for gardens, lawns, and woodland, drawn by a (3). 3.....

The landscape gardener often makes his own (4). In planning the grounds, he must consider the whole (5). 4..... 5.....

He may recommend the construction and arrangement of (6), (7), and fences on the grounds. 6..... 7.....

He may supervise the planting of trees, flowers, and shrubs by the (8). 8.....

Sometimes the landscape gardener is associated with a (9), and, if so, he may raise some of the (10) he plants. 9..... 10.....

1. plans	6. gardeners	12. catalog
2. salesmen	7. farm life	13. landscape
3. walks	8. beautiful	14. county
4. expensive	9. contractor	15. driveways
5. landscape architect	10. employ	16. nature
	11. nurseryman	17. stock

Mastery Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The landscape gardener helps to make our country more (1). 1.....

The landscape gardener gives people in cities and towns an opportunity to enjoy (2). 2.....

A landscape gardener may carry out plans for gardens, lawns, and woodland, drawn by a (3). 3.....

The landscape gardener often makes his own (4). In planning the grounds, he must consider the whole (5). 4.....
5.....

He may recommend the construction and arrangement of (6), (7), and fences on the grounds. 6.....
7.....

He may supervise the planting of trees, flowers, and shrubs by the (8). 8.....

Sometimes the landscape gardener is associated with a (9), and, if so, he may raise some of the (10) he plants. 9.....
10.....

1. plans	6. gardeners	12. catalog
2. salesmen	7. farm life	13. landscape
3. walks	8. beautiful	14. country
4. expensive	9. conservation	15. driveways
5. landscape	10. employ	16. nature
architect	11. nurseryman	17. stock

A landscape gardener decides how much
_(11)_ is needed to adequately enrich the 11.....
soil.

Another task is _(12)_ the land, thus 12.....
allowing for drainage, and levelling off
rough areas.

To make grass firm, the landscape
gardener supervises the _(13)_ of the lawn. 13.....

The landscape gardener _(14)_ those 14.....
plants, trees, and bushes which he believes
will _(15)_ with his general plan. 15.....

The landscape gardener must keep in
mind such items as _(16)_, the amount of 16.....
_(17)_ required, the _(18)_ of walks, drives, 17.....
and fences. 18.....

The landscape gardener must _(19)_ because 19.....
growth is so slow.

The landscape gardener should know how to
_(20)_ the trees, so that they will have the 20.....
desired size and shape.

Trees are sprayed to protect them from
destruction by _(21)_. 21.....

1. grading
2. edging
3. fertilizer
4. rejects
5. shade
6. selling
7. plan ahead
8. color
9. insects
10. selects
11. temperature
12. harmonize
13. arrangement
14. rolling
15. prune
16. frost

A landscape gardener decides how much

(11) is needed to adequately enrich the 11.....

soil.

Another task is (12) the land, thus 12.....

allowing for drainage, and levelling off

rough areas.

To make grass firm, the landscape

gardener supervises the (13) of the lawn. 13.....

The landscape gardener (14) those 14.....

plants, trees, and bushes which he believes

will (15) with his general plan. 15.....

The landscape gardener must keep in

mind such items as (16), the amount of 16.....

(17) required, the (18) of walks, drives, 17.....

and fences. 18.....

The landscape gardener must (19) because 19.....

growth is so slow.

The landscape gardener should know how to

(20) the trees, so that they will have the 20.....

desired size and shape.

Trees are sprayed to protect them from

destruction by (21). 21.....

1. grading
2. edging
3. fertilizer
4. rejects
5. shade
6. selling
7. plan ahead
8. color
9. insects
10. selects
11. temperature
12. harmonize
13. arrangement
14. rolling
15. prune
16. frost

The landscape gardener is really an (22) in the care and arrangement of lawns, flowers, trees, and shrubs. 22.....

The landscape gardener must be able to (23) the work of other gardeners. 23.....

Sometimes the landscape gardener must (24) trees to get a desired effect. 24.....

The landscape gardener is often asked to make an (25) of the cost of a job. 25.....

The landscape gardener must keep accurate records of the hours of (26) and the cost of the (27). In this way he can determine a (28). 26..... 27..... 28.....

He must keep abreast of new ideas and scientific experiments through much (29) and study. 29.....

He may feel that he is bringing joy and (30) into the lives of people. 30.....

In general we may say that people are becoming more (31) in beautifying home and community surroundings. 31.....

The landscape gardener has the joy of working with (32) things. 32.....

1. reading
2. growing
3. arrangement
4. artist
5. general farmer
6. labor
7. interested
8. imagination
9. fair price
10. stock
11. stock
12. clever
13. beauty
14. accounting
15. seasonal

The landscape gardener is really an (22) 22.....
in the care and arrangement of lawns, flowers, trees, and shrubs.

The landscape gardener must be able to (23) the work of other gardeners. 23.....

Sometimes the landscape gardener must (24) trees to get a desired effect. 24.....

The landscape gardener is often asked to make an (25) of the cost of a job. 25.....

The landscape gardener must keep accurate records of the hours of (26) and the cost of the (27). In this way he can determine a (28). 26..... 27..... 28.....

He must keep abreast of new ideas and scientific experiments through much (29) and study. 29.....

He may feel that he is bringing joy and (30) into the lives of people. 30.....

In general we may say that people are becoming more (31) in beautifying home and community surroundings. 31.....

The landscape gardener has the joy of working with (32) things. 32.....

1. reading	6. labor	11. stock
2. growing	7. interested	12. clover
3. arrangement	8. imagination	13. beauty
4. market	9. fair price	14. accounting
5. general farmer	10. stock	15. seasonal

His work requires _(33)_ for he is called upon to create new color or design effects. 33.....

Most of his work is done in _(34)_ air and _(35)_. 34..... 35.....

The work provides healthful _(36)_. 36.....

The work cannot become _(37)_ for there is such a variety of plants and designs. 37.....

The landscape gardener by further study can become a landscape _(38)_. 38.....

The landscape gardener has less work in _(39)_. 39.....

_(40)_ and summer are his _(41)_ seasons. 40.....

There are many ways in which the plans of a landscape gardener may be upset. Some of these are (a) unseasonal _(42)_; (b) loss through insect pests and plant _(43)_; _(44)_ in forest parks or wooded regions; (d) the _(45)_ of people who often destroy plants and shrubs. 41..... 42..... 43..... 44..... 45.....

The best training for this work is a four year course in an _(46)_ college. 46.....

1. monotonous	7. diseases	13. sunshine
2. weather	8. busy	14. leisure
3. floods	9. agricultural	15. gardener
4. architect	10. spring	16. interesting
5. fires	11. fresh	17. winter
6. imagination	12. care	18. exercise

His work requires _____ (33) for he is called 33.....

upon to create new color or design effects.

Most of his work is done in _____ (34) air and 34.....

_____ (35). 35.....

The work provides healthful _____ (36). 36.....

The work cannot become _____ (37) for there is 37.....

such a variety of plants and designs.

The landscape gardener by further study

can become a landscape _____ (38). 38.....

The landscape gardener has less work in

_____ (39). 39.....

_____ (40) and summer are his _____ (41) seasons. 40.....

There are many ways in which the plans 41.....

of a landscape gardener may be upset. Some

of these are (a) unseasonal _____ (42); (b) loss 42.....

through insect pests and plant _____ (43); _____ (44) 43.....

in forest parks or wooded regions; (d) the 44.....

_____ (45) of people who often destroy plants and 45.....

shrubs.

The best training for this work is a four

year course in an _____ (46) college. 46.....

1. monotonous	7. diseases	13. numerine
2. weather	8. busy	14. leisure
3. floods	9. agricultural	15. renewed
4. architect	10. spring	16. interesting
5. fires	11. fresh	17. winter
6. imagination	12. care	18. exercise

CHAPTER IX

THE FRUIT-GROWER

The Unit

The fruit-grower provides us with a variety of products which are both tasty and healthful. The kind of fruit grown will depend upon the climate and soil of a given region. The work includes the selection of stock, the planting, cultivating, pruning, spraying, harvesting, and finally, the marketing of the fruit crop. The improved methods of transportation and marketing has meant increased income for fruit-growers. This worker should have scientific training coupled with broad experience in order to cope with the many problems of this occupation. Success in fruit growing demands intelligence, willingness to work hard, and a spirit that refuses to be discouraged.

(Approximate time allotment - six periods)

The Delimitation

Service to Others

1. The fruit-grower helps to build the health of our people, for fruits form an important part of our daily diet, as well as that of invalids, convalescents and children.

2. The fruit-grower, through his co-operative marketing methods, supplies the community with a variety of fruits, in fine condition and available at nearby markets.

Required Tasks

1. The fruit-grower should select a suitable location for his business. Unlike other specialized farming, nearness to the city is not an important factor.

*2. The fruit-grower must be able to select good stock. Poor stock saves no money in the end. He may obtain his trees from a reputable nurseryman.

3. The stock must be planted carefully. There should be sufficient distance between trees in order that when full grown, they will not be crowded. Rolling or hilly ground has been found best.

4. The trees must be pruned every year in order to secure the maximum amount of fruit, and to encourage the proper spreading in order to make best use of the sunshine. Pruning will also help to cut back the tree so that it will be easy to pick the crop. Pruning is done in the late fall or winter while the sap is not flowing. Where branches have been pruned, farmers cover the area with a paint in order to protect the surface.

5. Unless the rainfall is normal, some provision must be made for watering young trees.

6. Fertilizing the soil and cultivating it, is another

2. The fruit-grower, through his co-operative marketing methods, supplies the community with a variety of fruits in fine condition and available at nearby markets.

Required Traits

1. The fruit-grower should select a suitable location for his business. Unlike other specialized farming, nearness to the city is not an important factor.

2. The fruit-grower must be able to select good stock. Poor stock saves no money in the end. He may obtain his trees from a reputable nurseryman.

3. The stock must be planted carefully. There should be sufficient distance between trees in order that when full grown, they will not be crowded. Holding or hilly ground has been found best.

4. The trees must be pruned every year in order to secure the maximum amount of fruit, and to encourage the proper spreading in order to make best use of the sunshine. Pruning will also help to cut back the tree so that it will be easy to pick the crop. Pruning is done in the late fall or winter while the sap is not flowing. Where branches have been pruned, farmers cover the area with a paint in order to protect the surface.

5. Unless the rainfall is normal, some irrigation must be made for watering young trees.

6. Fertilizing the soil and cultivating it, is another

important task if a large fruit yield of superior quality is to be expected.

7. Fruit-growers must check trees for holes in the branches. Cement filling may save the tree.

8. Spraying must be done several times during the season in order to prevent destruction by insects. Information as to time for spraying, as well as the solution required, may be obtained from the Department of Agriculture or from fruit-growers' magazines.

9. Grafting is another task of this worker.

10. Picking is usually done by men hired for the busy season. Ladders are used to reach the fruit.

11. The fruit must be sorted and graded in order to obtain high prices. Some fruit-growers wrap the fruit in identifying paper. The fruit is packed in crates or barrels and made ready to load on the truck.

12. The fruit-grower may market his crop through a co-operative. He may sell his products to a commission merchant, or he may take the fruit directly to the market. Roadside stands, if location warrants, increase the income.

13. The fruit-grower has much to learn in every phase of his work. He should read all bulletins and published information in this field.

14. Fruit-raising is an enterprise which must cover a long period of time. An accurate system of records should

important task if a large fruit yield of superior quality is to be expected.

7. Fruit-growers must check trees for holes in the branches. Cement filling may save the tree.

8. Spraying must be done several times during the season in order to prevent destruction by insects. Information as to time for spraying, as well as the solution required, may be obtained from the Department of Agriculture or from fruit-growers' magazines.

9. Grafting is another task of this worker.

10. Picking is usually done by men hired for the busy season. Ladders are used to reach the fruit.

11. The fruit must be sorted and graded in order to obtain high prices. Some fruit-growers wrap the fruit in identifying paper. The fruit is packed in crates or barrels and made ready to load on the truck.

12. The fruit-grower may market his crop through a co-operative. He may sell his products to a commission merchant, or he may take the fruit directly to the market. Roadside stands, if location warrants, increase the income.

13. The fruit-grower has much to learn in every phase of his work. He should read all bulletins and published information in this field.

14. Fruit-raising is an enterprise which must cover a long period of time. An accurate system of records should

help to show the condition of the business.

Advantages and Disadvantages

1. This is a growing occupation.

2. The fruit-grower may feel that he is performing great service.

3. The grower's own table is supplied with healthful foods.

4. The fruit-grower may realize a great profit during a favorable season. He is an independent worker.

5. The work is healthful since it is done out-of-doors. There is plenty of exercise.

*6. Fruit-growers' associations distribute helpful advice.

7. There is leisure time in winter.

8. One disadvantage is the chance of loss through unfavorable weather, insect pests, or blights. Much of this cannot be controlled.

*9. The farmer must expend money over a long period before many returns are received.

10. The harvesting season is a very busy one. Usually the picking must be done so quickly that hired laborers must do the work.

11. Some fruits spoil quickly. This means loss. The income is not regular.

12. There is much competition in this field.

help to show the condition of the business.

Advantages and Disadvantages

1. This is a growing occupation.

2. The fruit-grower may feel that he is performing great service.

3. The grower's own table is supplied with healthful foods.

4. The fruit-grower may realize a great profit during a favorable season. He is an independent worker.

5. The work is healthful since it is done out-of-doors. There is plenty of exercise.

6. Fruit-growers' associations distribute helpful advice.

7. There is leisure time in winter.

8. One disadvantage is the chance of loss through unfavorable weather, insect pests, or blights. Much of this cannot be controlled.

9. The farmer must expend money over a long period before many returns are received.

10. The harvesting season is a very busy one. Usually the picking must be done so quickly that hired laborers must do the work.

11. Some fruits spoil quickly. This means loss. The income is not regular.

12. There is much competition in this field.

13. The fruit-grower has much heavy manual labor.

Training

1. A thorough training in the horticultural school of a college of agriculture will give the best background for successful work.

2. A beginning may be made on a small scale with a small orchard.

3. Continued study is necessary in any case.

Financial Returns

The financial return must depend upon the size of the orchards, the fruit raised, the marketing arrangements, and the quality of the fruit.

Abilities Needed

1. The fruit-grower must be willing to work hard, and must be physically fit to do strenuous work. He must enjoy the work and have a love for nature.

2. The grower must be persevering in times of misfortune.

3. He must be able to direct his workers during the harvesting season.

*4. Intelligence and a scientific approach toward problems is needed in this work.

5. Business ability is essential in order to market crops wisely.

15. The fruit-grower has much heavy manual labor.

Training

1. A thorough training in the horticultural school or a college of agriculture will give the best background for successful work.

2. A beginning may be made on a small scale with a small orchard.

3. Continued study is necessary in any case.

Financial Returns

The financial return must depend upon the size of the orchards, the fruit raised, the marketing arrangements, and the quality of the fruit.

Abilities Needed

1. The fruit-grower must be willing to work hard, and must be physically fit to do strenuous work. He must enjoy the work and have a love for nature.

2. The grower must be persevering in times of misfortune.

3. He must be able to direct his workers during the harvesting season.

4. Intelligence and a scientific approach towards problems is needed in this work.

5. Business ability is essential in order to market crops wisely.

Unit Assignment

(Approximate time allotment - six periods)

This unit on the fruit-grower is planned for group work. An average group would number from six to eight pupils. The group is composed of pupils who have selected this unit of work for special study.

A few pictures, either in books or mounted, that pupils may study, will introduce the work. Books should be available, also magazines and other sources of information.

(SG-1) Organize your group. Elect a chairman and a secretary. The chairman will assign a particular task to each member. The secretary will keep a record of all group discussions. Your personal co-operation is necessary if the group work is to be successful.

Service to Others

(SG-2) Fruit in any form is good for us. Why? If you cannot find the answer, plan to ask your health teacher. (6) p. 83.

(SG-3) Make a list of the fruits which you have seen in the large fruit markets. What other fruits are sold in cans?

(*SG-4) Why is it possible for us to use daily so many fruits that come from far away? What would be the result if we had to depend on Rhode Island fruits only? (6); p. 145.

Unit Assignment

(Approximate time allotment - six periods)

This unit on the fruit-grower is planned for group work. An average group would number from six to eight pupils. The group is composed of pupils who have selected this unit of work for special study.

A few pictures, either in books or mounted, that pupils may study, will introduce the work. Books should be available, also magazines and other sources of information.

(SS-1) Organize your group. Elect a chairman and a secretary. The chairman will assign a particular task to each member. The secretary will keep a record of all group discussions. Your personal co-operation is necessary if the group work is to be successful.

Service to Others

(SS-2) Fruit in any form is good for us. Why? If you cannot find the answer, plan to ask your health teacher. (U) p. 22.

(SS-3) Make a list of the fruits which you have seen in the large fruit markets. What other fruits are sold in cans?

(SS-4) Why is it possible for us to use daily so many fruits that come from far away? What would be the result if we had to depend on Rhode Island fruits only? (G): p. 145.

Required Tasks

(*SG-5) Study the pictures which you have on hand. Discuss briefly (a) the jobs represented in the picture, and (b) the tasks which must have been done before the scene pictured was possible.

(SG-6) From whom does the fruit-grower purchase his stock? What is meant by "Good stock"? What must a fruit-grower consider when planting young trees? (4) pp. 144, 145; (9) pp. 66-67; p. 68; (1) p. 249; (2) p. 63; (5) p. 172; (6) p. 83; (10) pp. 96-98, Part III; (8) pp. 6-7.

(SG-7) What does a fruit-grower mean by such terms as: (a) pruning; (b) spraying; (c) grafting? Why does he do these jobs? *When is each done? (5) pp. 173-174; (10) pp. 98-106; (7) pp. 56-57; (8) p. 7.

(SG-8) Harvesting time is the busy season. Usually the fruit-grower must hire men to help. Why? What do the men do? What equipment must be ready? What jobs are necessary before the fruit can be marketed? (9) pp. 65-66; (7) pp. 58-61; (2) p. 62.

(*SG-9) What are some ways in which he can sell his crop? What is a "commission merchant"? a fruit-growers' co-operative? (4) p. 145; (9) p. 65; (5) p. 174; (1) p. 250; (2) p. 62.

Advantages and Disadvantages

(SG-10) What are the advantages which a fruit-grower

Required Tasks

(*30-5) Study the pictures which you have on hand. Discuss briefly (a) the jobs represented in the pictures, and (b) the tasks which must have been done before the scene pictured was possible.

(30-6) From whom does the fruit-grower purchase his stock? What is meant by "good stock"? What must a fruit-grower consider when planting young trees? (4) pp. 144, 145; (6) pp. 66-67; p. 68; (1) p. 249; (2) p. 66; (5) p. 172; (8) p. 88; (10) pp. 88-93, Part III; (9) pp. 6-7.

(30-7) What does a fruit-grower mean by such terms as: (a) pruning; (b) spraying; (c) grafting? Why does he do these jobs? When is each done? (5) pp. 173-174; (10) pp. 93-100; (7) pp. 56-57; (4) p. 7.

(30-8) Harvesting time is the busy season. Usually the fruit-grower must hire men to help. Why? What do the men do? What equipment must be ready? What jobs are necessary before the fruit can be marketed? (9) pp. 66-68; (7) pp. 58-61; (2) p. 82.

(*30-9) What are some ways in which he can sell his crop? What is a "commission merchant"? a fruit-growers' co-operative? (4) p. 148; (8) p. 88; (5) p. 174; (1) p. 250; (9) p. 68.

Advantages and Disadvantages

(30-10) What are the advantages which a fruit-grower

enjoys? Remember to consider the effect of the work physically and mentally, as well as conditions of work. (9) p. 67; (5) p. 174; (2) p. 63; (6) pp. 1, 6, 7.

(SG-11) What chances for loss must the fruit-grower face? What expenses must he be ready to meet? Consider other disadvantages. (9) pp. 65-66-67-68; (5) pp. 174-175; (8) p. 2.

Training

(*SG-12) Where could you study fruit-raising in this state? What is the best preparation? In what other ways could you learn? *Look up the courses given in fruit-raising. Explain some of the agricultural terms in the catalogue. (4) p. 144; (9) p. 73; (5) p. 176; (8) p. 3.

Financial Returns

(*SG-13) Upon what conditions will his income depend? *What is implied in the words "a good apple year" or "a poor apple year"? (9) p. 75; (8) p. 5.

Abilities Needed

(*SG-14) Review the tasks which a fruit-grower must be ready to do. What kind of man would do these things most successfully? Be ready to defend your answer. (9) p. 68; (5) pp. 175-176; (9) pp. 75-76; (8) p. 3.

(SG-15) When you have completed your study, make a written report and hand it to your teacher. Consult the catalogue for optional work.

employs? Remember to consider the effect of the work physically and mentally, as well as conditions of work. (9) p. 67; (5) p. 174; (2) p. 65; (6) pp. 1, 6, 7.

(30-11) What chances for loss must the fruit-grower face? What expenses must he be ready to meet? Consider other disadvantages. (9) pp. 65-66-67-68; (5) pp. 174-175; (2) p. 2.

Training

(*30-12) Where could you study fruit-raising in this state? What is the best preparation? In what other ways could you learn? Look up the courses given in fruit-raising. Explain some of the agricultural terms in the catalogue. (4) p. 144; (2) p. 73; (3) p. 176; (8) p. 3.

Financial Returns

(*30-13) Upon what conditions will his income depend? What is implied in the words "a good apple year" or "a poor apple year"? (9) p. 75; (5) p. 5.

Abilities Needed

(*30-14) Review the tasks which a fruit-grower must be ready to do. What kind of man would do these things most successfully? Be ready to defend your answer. (9) p. 68; (3) pp. 175-176; (9) pp. 75-76; (3) p. 3.

(30-15) When you have completed your study, make a written report and hand it to your teacher. Consult the catalogue for optional work.

References

1. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

2. Davis, Frank G. and Davis, B. Carnall, Guidance for Youth, Ginn and Co., Boston, Mass., 1928.

3. Edmonson, Joseph B. and Dondineau, Arthur, Vocations Through Problems, MacMillan Co., New York, N. Y., 1937.

4. Gowin, Enoch Burton, Wheatley, William Alonzo, and Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1923.

5. Hill, Howard C., Vocational Civics, Ginn and Co., Boston, Mass., 1928.

6. Holbrook, Harold Lyman, and MacGregor, A. Laura, Our World of Work, Allyn and Bacon, Boston, Mass., 1929.

7. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

8. Monograph No. 21, Horticulture as a Career, The Institute for Research, Chicago, Ill., 1931.

9. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

10. Power, R. A. and Kivlin, Earl Vincent, Handbook of Farming for Boys and Girls, E. M. Hale Co., Milwaukee, Wis., 1937.

Note: Many books include a discussion of general farming only. Much of the information will apply to the fruit-grower's work. Be sure to include such books in your reading.

Optional Activities

1. Write a letter to the State Department of Agriculture requesting information on fruit-raising in Rhode

References

1. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1938.

2. Davis, Frank G. and Davis, E. Gerrard, Guidance for Youth, Ginn and Co., Boston, Mass., 1932.

3. Edmonson, Joseph E. and Footkeeper, Arthur, Vocations Through Problems, MacMillan Co., New York, N. Y., 1937.

4. Cowin, Mason Burton, Wheatley, William Alonzo, and Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1928.

5. Hill, Howard C., Vocational Civics, Ginn and Co., Boston, Mass., 1922.

6. Holbrook, Harold Ipsen, and Hagberger, A. Laura, Our World of Work, Allyn and Bacon, Boston, Mass., 1929.

7. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1920.

8. Monograph No. 21, Horticulture as a Career, The Institute for Research, Chicago, Ill., 1931.

9. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1920.

10. Power, E. A. and Allyn, Earl Vincent, Handbook of Farming for Boys and Girls, A. M. Hale Co., Milwaukee, Wis., 1937.

Note: Many books include a discussion of general farming city. Much of the information will apply to the fruit-growers work. Be sure to include such books in your reading.

Optional Activities

1. Write a letter to the State Department of Agriculture requesting information on fruit-raising in Rhode

Island. Write to the United States Department of Agriculture for free bulletins on this subject.

2. Draw a chart showing the workers which must handle a cargo of bananas before they reach your home; a carton of oranges.

3. Make a tentative time schedule for the fruit-grower. Include new planting, plowing, fertilizing, spraying, pruning, harvesting, and marketing.

4. Plan a discussion between a market gardener and a fruit-grower. Have each bring out his advantages and the other's disadvantages.

5. Make a series of drawings showing the fruit-grower at work.

6. Why not plan a fruit-growers' exhibit? Use books, maps, pictures, graphs, cans of fruit, real or artificial fruit. Include an article by your committee. Drawings of tools and equipment will be interesting. Consult with your librarian.

7. Make a picture map of the fruit regions in the United States.

8. Make a Rhode Island fruit map.

9. Design a label for a fruit-grower. You will want to make it colorful and interesting to catch the attention. Choose a trade name.

Island. Write to the United States Department of Agriculture for free bulletins on this subject.

2. Draw a chart showing the workers which must handle a cargo of bananas before they reach your home; a carton of oranges.

3. Make a tentative time schedule for the fruit-grower. Include new planting, plowing, fertilizing, spraying, pruning, harvesting, and marketing.

4. Plan a discussion between a market gardener and a fruit-grower. Have each bring out his advantages and the other's disadvantages.

5. Make a series of drawings showing the fruit-grower at work.

6. Why not plan a fruit-growers' exhibit? Use books, maps, pictures, prints, cans of fruit, real or artificial fruit. Include an article by your committee. Drawings of tools and equipment will be interesting. Consult with your librarian.

7. Make a picture map of the fruit regions in the United States.

8. Make a Rhode Island fruit map.

9. Design a label for a fruit-grower. You will want to make it colorful and interesting to catch the attention. Choose a trade name.

10. Make a notebook on fruit-growing. If you make it as complete as possible, attractive with pictures, maps, and drawings, and neatly written or typed, your teacher will use it as a source of information for the next class.

11. Make a list of the books that have helped you in this study. We call this a bibliography.

If you have original suggestions for activities, speak to your teacher.

Class Presentation Period

1. Each member of the group has a part in presenting the story of this worker. The optional activities are presented during this period.

2. Comments and questions by the class is a vital part of the presentation period.

Testing

Only members of the group which studied the fruit-grower will take this test.

10. Make a notebook on fruit-growing. If you make it as complete as possible, attractive with pictures, maps, and drawings, and neatly written or typed, your teacher will use it as a source of information for the next class.

11. Make a list of the books that have helped you in this study. We call this a bibliography.

If you have original suggestions for activities, speak to your teacher.

Class Presentation Period

1. Each member of the group has a part in presenting the story of this worker. The optional activities are presented during this period.

2. Comments and questions by the class is a vital part of the presentation period.

Testing

Only members of the group which studied the fruit-grower will take this test.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

One reason why fruit-growers can supply a variety of fresh fruit at low prices is 1.....

a) the fruit-grower goes to market daily to sell his crop.
b) the fruit-growers can ship fruit quickly through improved means of transportation and marketing.
c) the fruit-grower wants little profit.
d) the fruit-grower lives near the city.

People use much fruit today because 2.....

a) it is cheaper than any other food.
b) it is easier to get than vegetables.
c) everybody else buys it.
d) science has proved that fruit is particularly healthful.

The fruit-grower sets his young trees some distance apart in order that 3.....

a) the trees, when full grown, will not be crowded.
b) the land between the trees may be seeded.
c) new trees may be planted.
d) no space will be wasted.

Fruit trees are sprayed 4.....

a) to make the fruit clean.
b) to make the tree strong.
c) to ripen the fruit quickly.
d) to prevent destruction by insect pests. and plant diseases.

Grafting by a fruit-grower means 5.....

a) making dishonest profits.
b) making more money than other fruit-growers
c) a way of harvesting.
d) starting new growth on old stock.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

One reason why fruit-growers can supply a variety of fresh fruit at low prices is ..... 1.

a) the fruit-grower goes to market daily to sell his crop.
b) the fruit-growers can ship fruit quickly through improved means of transportation and marketing.
c) the fruit-grower wants little profit.
d) the fruit-grower lives near the city.

People use much fruit today because ..... 2.

a) it is cheaper than any other food.
b) it is easier to get than vegetables.
c) everybody else buys it.
d) science has proved that fruit is particularly healthful.

The fruit-grower sets his young trees some distance apart in order that ..... 3.

a) the trees, when full grown, will not be crowded.
b) the land between the trees may be seeded.
c) new trees may be planted.
d) no space will be wasted.

Fruit trees are sprayed ..... 4.

a) to make the fruit clean.
b) to make the tree strong.
c) to ripen the fruit quickly.
d) to prevent destruction by insect pests and plant diseases.

Grafting by a fruit-grower means ..... 5.

a) making dishonest profits.
b) making more money than other fruit-growers
c) a way of harvesting.
d) starting new growth on old stock.

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The fruit-grower supplies us with a variety of (1) foods. 1.....

The fruit-growers have learned that (2) marketing is best. Therefore, we have fruit-growers' associations to sell the fruit. 2.....

Unlike the market gardener, the fruit-grower can live at a (3) from the city and still have a profitable business. 3.....

*The wise fruit-grower will invest his money in the (4) stock he can get. 4.....

Trees must be pruned each year in order to get a (5) of good quality. Trees are pruned so that every part will get its share of (6). Pruning helps to shape the trees so that the fruit is easy to (7). 5..... 6..... 7.....

The fruit-grower must first (8) the soil if a large yield is expected. 8.....

1. fertilize	6. harvest	11. distance
2. pick	7. soil	12. co-operative
3. near	8. individual	13. shake
4. average	9. healthful	14. remove
5. sunshine	10. best	15. most

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The fruit-grower supplies us with a variety of (1) foods. 1.....

The fruit-growers have learned that (2) marketing is best. Therefore, we have fruit-growers' associations to sell the fruit. 2.....

Unlike the market gardener, the fruit-grower can live at a (3) from the city and still have a profitable business. 3.....

The wise fruit-grower will invest his money in the (4) about he can get. 4.....

Trees must be pruned each year in order to get a (5) of good quality. Trees are pruned so that every part will get its share of (6). Pruning helps to make the trees so that the fruit is easy to (7). 5..... 6..... 7.....

The fruit-grower must first (8) the soil if a large yield is expected. 8.....

1. fertilize	6. harvest	11. distance
2. pick	7. soil	12. co-operative
3. near	8. individual	13. share
4. average	9. healthful	14. remove
5. sunshine	10. best	15. most

When holes are found in a fruit tree, the fruit-grower fills them with (9). 9.....

A fruit-grower may get help from the (10) of (11). 10..... 11.....

His busy season is (12) time. 12.....

The fruit must be (13) according to size and quality to get the best prices. 13.....

The fruit-grower needs to keep accurate (14) of costs and income. 14.....

The fruit-grower must (15) for it takes several years before his trees will yield much fruit. 15.....

He enjoys (16) work with plenty of healthful (17). He must be (18) fit to do heavy work. 16..... 17..... 18.....

The fruit-grower's income will depend somewhat upon the (19) of the orchard, the (20) of the fruit raised, and the arrangements for harvesting and (21) the crop, as well as the quality of the fruit. 19..... 20..... 21.....

1. physically	9. marketing	17. save little
2. very heavy	10. stories	18. agriculture
3. Department	11. harvesting	19. graded
4. exercise	12. plan ahead	20. records
5. priced	13. cement	21. glue
6. winter	14. excitement	22. outdoor
7. size	15. climate	23. various kinds
8. Bureau	16. Interior	24. socially

When holes are found in a fruit tree, the fruit-grower fills them with (9). 9.....

A fruit-grower may get help from the (10) of (11). 10.....

His busy season is (12) time. 11.....

The fruit must be (13) according to size and quality to get the best prices. 12.....

The fruit-grower needs to keep accurate (14) of costs and income. 13.....

The fruit-grower must (15) for it takes several years before his trees will yield much fruit. 14.....

He enjoys (16) work with plenty of healthful (17). He must be (18) fit to do heavy work. 15.....

The fruit-grower's income will depend somewhat upon the (19) of the orchard, the (20) of the fruit raised, and the arrangements for harvesting and (21) the crop, as well as the quality of the fruit. 16.....

1. physically	9. marvelling	17. save little
2. very heavy	10. stories	18. agriculture
3. department	11. harvesting	19. graded
4. exercise	12. plan ahead	20. records
5. priced	13. cement	21. pine
6. winter	14. excitement	22. outdoor
7. size	15. climate	23. various kinds
8. dream	16. interior	24. costly

There is a chance for (22) time in winter. 22.....

The income of the fruit-grower is not (23) 23.....
He may lose money because some fruits (24) 24.....
easily.

Fruit-growing is a branch of (25) 25.....

The best training for this work is a four-
year course in an (26) college. 26.....

The successful fruit-grower needs (27) 27.....
experience in this work.

He must learn efficient (28) methods in 28.....
order to raise and market his crop with profit.

The fruit-grower must have the ability to
(29) the many hired workers. 29.....

The kind of fruit he decides to raise
will depend upon the (30) of the region, and 30.....
the (31) of the soil. 31.....

The fruit-grower, in times of little rain,
must provide some means of (32). 32.....

1. business
2. leisure
3. broad
4. interest
5. regular
6. richness
7. irrigation
8. spoil
9. erosion
10. direct
11. ripens
12. irregular
13. fertilization
14. climate
15. horticulture
16. busy
17. agricultural
18. a little
19. small
20. animal husbandry

There is a chance for (22) time in winter. 22.....

The income of the fruit-grower is not (23) 23.....

He may lose money because some fruits (24) 24.....

easily.

Fruit-growing is a branch of (25) 25.....

The best training for this work is a four-

year course in an (26) college. 26.....

The successful fruit-grower needs (27) 27.....

experience in this work.

He must learn efficient (28) methods in 28.....

order to raise and market his crop with profit.

The fruit-grower must have the ability to

(29) the many hired workers. 29.....

The kind of fruit he decides to raise

will depend upon the (30) of the region, and 30.....

the (31) of the soil. 31.....

The fruit-grower, in times of little rain,

must provide some means of (32). 32.....

1. business	9. soil	15. horticulture
2. leisure	8. economic	16. dry
3. broad	10. direct	17. agricultural
4. interest	11. climate	18. a little
5. regular	12. irregular	19. small
6. richness	13. fertilization	20. animal
7. irrigation	14. climate	husbandry

CHAPTER X
THE STOCK-RAISER

The Unit

The stock-farmer provides us with the materials for some of our food and clothing. This is a very ancient occupation, but scientific knowledge as applied to breeding, care, and feeding of animals, has revolutionized methods of stock-raising. The work of the stock-farmer will depend, to a large extent, on the type of animal which he raises, as well as the part of the country in which he is located. Large herds are more common in the Central and Western United States than elsewhere. The stock-farmer must face such problems as loss through disease, weather, delay in marketing, and fluctuating prices. The successful stock-raiser must combine business sense with a true fondness for animals and a spirit of perseverance in times of discouragement.

(Approximate time allotment - six periods)

The Delimitation

Service to Others

1. Stock-raising is an ancient occupation and one upon which we must depend for food and clothing. Beef, lamb, and pork are popular meats. Wool for clothing and hides for

CHAPTER X

THE STOCK-RAISER

The Unit

The stock-farmer provides us with the materials for some of our food and clothing. This is a very ancient occupation, but scientific knowledge as applied to breeding, care, and feeding of animals, has revolutionized methods of stock-raising. The work of the stock-farmer will depend, to a large extent, on the type of animal which he raises, as well as the part of the country in which he is located. Large herds are more common in the Central and Western United States than elsewhere. The stock-farmer must face such problems as loss through diseases, weather, delay in marketing, and fluctuating prices. The successful stock-raiser must combine business sense with a true fondness for animals and a spirit of perseverance in times of discouragement.

(Approximate time allotment - six periods)

The Delineation

Service to Others

1. Stock-raising is an ancient occupation and one upon which we must depend for food and clothing. Beef, lamb, and pork are popular meats. Wool for clothing and hides for

leather are products of stock-raising.

2. Horses and mules are still important work animals, even though we see them so seldom on city streets.

Required Tasks

Of the several types of stock-raising, the following will be considered: (1) beef cattle; (2) horses and mules; (3) hogs; (4) sheep.

1. Raising Beef Cattle:

(a) The farmer may specialize in raising and selling baby beeves.

(b) He may buy cattle, fatten them for market, and sell at high price.

(c) The farmer must provide an open shed, protected on one side.

(d) Salt and clean water must be provided. Cleanliness in barns, pasture, and animals must be maintained.

(e) The farmer must carefully check and record cost of feed, care, and selling price.

(f) The economical farmer uses as much home-grown fodder as possible.

(*g) Proper feeding is essential so that food elements are well balanced.

(h) On a large farm, rough pasture or grazing lands must be provided, but this must be supplemented by proper food.

leather are products of stock-raising.

2. Horses and mules are still important work animals, even though we see them so seldom on city streets.

Required Tasks

Of the several types of stock-raising, the following will be considered: (1) beef cattle; (2) horses and mules; (3) hogs; (4) sheep.

I. Raising Beef Cattle:

(a) The farmer may specialize in raising and selling baby beeves.

(b) He may buy cattle, fatten them for market, and sell at high price.

(c) The farmer must provide an open shed, protected on one side.

(d) Salt and clean water must be provided. Cleanliness in barns, pasture, and animals must be maintained.

(e) The farmer must carefully check and record cost of feed, care, and selling price.

(f) The economical farmer uses as much home-grown fodder as possible.

(g) Proper feeding is essential so that food elements are well balanced.

(h) On a large farm, rough pasture or grazing lands must be provided, but this must be supplemented by proper food.

(*i) The breeding and care of young calves is important if high quality stock is to be maintained.

(j) Branding is done in order to identify cattle when on the grazing range.

(k) From 250 to 1000 cattle make up an average herd in the grazing area. The farmer may lease pasture land, or he may get a permit for grazing privileges in public land.

(l) The farmer must arrange for the marketing and transportation of his stock.

(*m) He must carefully select new stock.

(n) Special care must be given to cows that are sick. Sometimes a veterinary must be called.

(o) He must have his farm ready for inspection at any time.

2. Horses and Mules:

(a) The stock-raiser must select good stock.

(b) He must feed his horses at least three times daily. He must provide well-balanced food and an adequate supply of clean water.

(c) He must allow enough pasture land for the horses.

(d) Special care must be given to the young colts.

(e) The horses must be protected against overwork, and from becoming overheated or cold.

(f) The stock-raiser must provide clean, well-constructed barns. He must groom and curry horses daily.

(4) The breeding and care of young calves is important if high quality stock is to be maintained.

(j) Branding is done in order to identify cattle when on the grazing range.

(k) From 250 to 1000 cattle make up an average herd in the grazing area. The farmer may lease pasture land, or he may get a permit for grazing privileges in public land.

(l) The farmer must arrange for the marketing and transportation of his stock.

(m) He must carefully select new stock.

(n) Special care must be given to cows that are sick. Sometimes a veterinary must be called.

(o) He must have his farm ready for inspection at any time.

2. Horses and mules:

(a) The stock-raiser must select good stock.

(b) He must feed his horses at least three times daily. He must provide well-balanced food and an adequate supply of clean water.

(c) He must allow enough pasture land for the horses.

(d) Special care must be given to the young colts.

(e) The horses must be protected against overwork, and from becoming overheated or cold.

(f) The stock-raiser must provide clean, well-ventilated barns. He must groom and curry horses daily.

Clipping must be done annually.

(g) The stock-raiser must care for sick horses, sometimes calling in the veterinary.

(h) He must make arrangements for the sale and transportation of horses.

(i) Accurate records of breeding, fodder costs, and transportation expenditures will insure good business methods.

(j) Many states require that horses and mules be registered.

3. Hogs:

(a) The farmer must select good stock so that hogs will reproduce rapidly.

(b) Special care must be given to the sows and young pigs.

(c) The stockman must guard against diseases by keeping pen, stock, and pasture clean. Water for drinking and pools in which hogs may lie down must be kept clean.

(d) Proper food must be provided so that hogs will fatten quickly. Corn is the most common food.

(*e) Because of the danger of infected pasture lands, the stockman must rotate his pasture.

(f) The stock-raiser must arrange for the marketing and transportation of hogs.

(g) He must keep careful account of cost of feed, care,

clipping must be done annually.

(g) The stock-raiser must care for sick horses, sometimes calling in the veterinary.

(h) He must make arrangements for the sale and transportation of horses.

(i) Accurate records of breeding, fodder costs, and transportation expenditures will insure good business methods.

(j) Many states require that horses and mules be registered.

3. Hogs:

(a) The farmer must select good stock so that hogs will reproduce rapidly.

(b) Special care must be given to the sows and young pigs.

(c) The stockman must guard against diseases by keeping pen, stock, and pasture clean. Water for drinking and pools in which hogs may lie down must be kept clean.

(d) Proper food must be provided so that hogs will fatten quickly. Corn is the most common food.

(e) Because of the danger of infected pasture lands, the stockman must rotate his pastures.

(f) The stock-raiser must arrange for the marketing and transportation of hogs.

(g) He must keep careful account of cost of feed, care

and transportation expenditures so that he can tell whether his farm is profitable or not.

4. Sheep:

(a) The sheep-raiser must select a location where there will be sufficient rough pasture land.

(*b) He must select good stock.

(c) He must protect sheep from being ravaged by dogs - shepherd is usually hired to care for the sheep.

(d) He must protect sheep from insect pests and diseases common to this animal.

(e) Proper food and water in addition to grazing are needed. When large tracts are leased or bought, watering places must be provided, and feed storage places built.

(f) Good shelter must be built. Sheep barns are open to the south. Particular care must be given the young lambs.

(g) Pastures, barns, and sheep must be clean and free from infection.

(h) The farmer must shear the sheep before the warm summer. This is done by large shearing concerns, or by hired men. Dipping is a practice that helps to clean the sheep.

(i) Sick sheep must be given special care.

(j) Many stock-raisers fatten sheep for market.

(k) The sheep-raiser must keep accurate records of all expenses.

and transportation expenditures so that he can tell whether his farm is profitable or not.

4. Sheep:

(a) The sheep-raiser must select a location where there will be sufficient rough pasture land.

(b) He must select good stock.

(c) He must protect sheep from being ravaged by dogs - shepherd is usually hired to care for the sheep.

(d) He must protect sheep from insect pests and diseases common to this animal.

(e) Proper food and water in addition to grazing are needed. When large tracts are leased or bought, watering places must be provided, and feed storage places built.

(f) Good shelter must be built. Sheep barns are open to the south. Particular care must be given the young lambs.

(g) Feathers, burrs, and sleep must be cleaned and free from infection.

(h) The farmer must shear the sheep before the warm summer. This is done by large shearing concerns, or by hired men. Dipping is a practice that helps to clean the sheep.

(i) Sick sheep must be given special care.

(j) Many stock-raisers fatten sheep for market.

(k) The sheep-raiser must keep accurate records of all expenses.

Advantages and Disadvantages

1. Stock-raising is an out-of-doors occupation. It provides opportunity for healthful exercise in the open air.

2. The stock-raiser usually lives some distance from large population centers, owing to the need for extensive pasture lands. He may enjoy the relaxation and quiet that living in the country affords.

3. The stock-raiser may become independent.

4. He has opportunity to experiment and use his own initiative and resourcefulness in breeding and caring for his stock.

5. The stock-raiser may feel that he is engaged in one of the most ancient and important of agricultural occupations.

6. The United States Department of Agriculture, through its various bureaus and experiment stations, has taken particular interest in animal husbandry. Farmers may get information and help in solving their problems.

7. The stock-raiser gets an important part of his food supply at cost from his own farm.

8. The economical farmer will use manure for fertilizer.

9. The stock-raiser may look forward to a fair scale of living.

10. The breeding of pure bred animals has caused prices to be more favorable to the farmer.

Advantages and Disadvantages

1. Stock-raising is an out-of-doors occupation. It provides opportunity for healthful exercise in the open air.

2. The stock-raiser usually lives some distance from large population centers, owing to the need for extensive pasture lands. He may enjoy the relaxation and quiet that living in the country affords.

3. The stock-raiser may become independent.

4. He has opportunity to experiment and use his own initiative and resourcefulness in breeding and caring for his stock.

5. The stock-raiser may feel that he is engaged in one of the most ancient and important of agricultural occupations.

6. The United States Department of Agriculture, through its various bureaus and experiment stations, has taken particular interest in animal husbandry. Farmers may get information and help in solving their problems.

7. The stock-raiser gets an important part of his food supply at cost from his own farm.

8. The economical farmer will use manure for fertilizer.

9. The stock-raiser may look forward to a fair scale of living.

10. The breeding of pure bred animals has caused prices to be more favorable to the farmer.

11. Stock-farming offers an easier method to change forage crops into desirable food stuffs, thus saving money, energy, and preventing waste.

12. The average stock-farmer needs little expensive equipment. However, he must invest much money in his stock.

13. Stock-farmers, who can conveniently do so, may get permits to use public lands for grazing.

14. Stock-raisers have the opportunity to work with animals. This is gratifying if a man enjoys the work.

15. The average needs quite a bit of capital as a beginning investment.

16. The income of stock-raisers will fluctuate in direct relation to supply and demand, and the losses which he must be prepared to meet.

17. There is a chance of loss through disease, weather conditions, and low prices on marketed goods.

18. The sheep-raiser loses many lambs and sheep through attacks by dogs.

19. For large herds, the farmer must buy or lease large tracts of land for pasture.

20. The work is usually too strenuous for women.

21. There is plenty of hard manual labor. Many disagreeable tasks must be done.

22. There is little chance for vacations. Animals must be cared for daily.

11. Stock-farming offers an easier method to change forage crops into desirable food stuffs, thus saving money, energy, and preventing waste.

12. The average stock-farmer needs little expensive equipment. However, he must invest much money in his stock.

13. Stock-farmers, who can conveniently do so, may get permits to use public lands for grazing.

14. Stock-raisers have the opportunity to work with animals. This is gratifying if a man enjoys the work.

15. The average needs quite a bit of capital as a beginning investment.

16. The income of stock-raisers will fluctuate in direct relation to supply and demand, and the losses which he must be prepared to meet.

17. There is a chance of loss through disease, weather conditions, and for prices commanded goods.

18. The sheep-raiser loses many lambs and sheep through attacks by dogs.

19. For large herds, the farmer must buy or lease large tracts of land for pasture.

20. The work is usually too strenuous for women.

21. There is plenty of hard manual labor. Many disagreeable tasks must be done.

22. There is little chance for vacations. Animals must be cared for daily.

Training

Training in animal husbandry at an agricultural college is advisable. Experience on a well-equipped farm, supplemented by reading and study, is one way to enter this work.

Financial Returns

Managers of large western ranches may receive $4000 to $5000 a year. Farm hands receive $20 to $50 with maintenance. The income of the independent farmer will depend upon location, size and quality of the herd, the amount of pasturage provided, and the current prices of meat or hides.

Abilities Needed

*1. The stock-raiser must be able to judge and select good stock.

2. He should know how to handle animals sympathetically. Fondness for animals is a necessity.

3. He should be able to direct others in this work in such a way that fine co-operation results.

4. He must be able to work long hours at physically-tiring work.

*5. He must have the ability to make decisions, interpret market reports and trends, and plan to market at favorable times.

*6. He should be capable of carrying on experiments and be ready to change his ways for more scientific and effective methods.

Training

Training in animal husbandry at an agricultural college is advisable. Experience on a well-equipped farm, supplemented by reading and study, is one way to enter this work.

Financial Returns

Managers of large western ranches may receive $4000 to $5000 a year. Farm hands receive $20 to $50 with maintenance. The income of the independent farmer will depend upon location, size and quality of the herd, the amount of pasturage provided, and the current prices of meat or hides.

Abilities Needed

1. The stock-raiser must be able to judge and select good stock.

2. He should know how to handle animals sympathetically. Fondness for animals is a necessity.

3. He should be able to direct others in this work in such a way that fine co-operation results.

4. He must be able to work long hours at physically-tiring work.

5. He must have the ability to make decisions, interpret market reports and trends, and plan to market at favorable times.

6. He should be capable of carrying on experiments and be ready to change his ways for more scientific and effective methods.

7. The stock-raiser needs the courage to carry on in spite of loss and discouragement.

8. He should have salesmanship ability.

9. He should be able to undertake disagreeable tasks and carry them through to completion.

10. The stock-raiser has many problems to face. He must plan ahead intelligently.

11. The stock-raiser who would succeed must have a reputation for honesty, cleanliness, and consideration for others.

*12. He must be willing to spend time in study and making records, for only so will he be able to improve his herd.

Unit Assignment

This unit is designed for use by a small group.

(The concepts in this unit are new to city boys and girls, many of whom have no idea of a stock farm. For this reason, more preparation in the form of visual aids and introductory discussion is needed.)

(SG-1) You will do well to organize your group into a committee on stock-farming. Elect a chairman. The chairman will preside over all discussions, and assign parts for presentation or display. The secretary will keep a record of the main points of the discussions and note the group assignments. Each member must do his share if group work is

7. The stock-raiser needs the courage to carry on in spite of loss and discouragement.

8. He should have salesmanship ability.

9. He should be able to undertake disagreeable tasks and carry them through to completion.

10. The stock-raiser has many problems to face. He must plan ahead intelligently.

11. The stock-raiser who would succeed must have a reputation for honesty, cleanliness, and consideration for others.

12. He must be willing to spend time in study and making records, for only so will he be able to improve his herd.

Unit Assignment

This unit is designed for use by a small group.

(The concepts in this unit are new to city boys and girls, many of whom have no idea of a stock farm. For this reason, more preparation in the form of visual aids and introductory discussion is needed.)

(Ss-1) You will do well to organize your group into a committee on stock-farming. Elect a chairman. The chairman will preside over all discussions, and assign parts for presentation or display. The secretary will keep a record of the main points of the discussions and note the group assignments. Each member must do his share if group work is

to succeed. Don't forget to bring to the group any pictures, magazines, or books that you can find on the raising of animals. These will help you to think more accurately.

Informal Discussion (Teacher with group)

What are some of the tasks of the dairy-farmer in caring for his herds of milch cows? A stock-raiser must make somewhat the same provision for his animals. Why does a stock-raiser raise hogs? horses? sheep? beef cattle? How would the job of providing pasture for a herd of six sheep differ from providing pasture for a thousand? In what part of the country would you find large herds? Why?

Pass to the group pictures from Geographic Magazines, and government bulletins on stock-raising. Discuss the occupational aspects of the pictures.

Service to Others

(SG-2) In what ways does the stock-raiser give service to others? You may include the raising and care of any type of domesticated animals in your thinking. (12) pp. 3-4; (7) pp. 85, 87; (9) p. 2.

(*SG-3) Make a list of the products which we get from animals. Do not forget the by-products. Use an encyclopaedia. (6) p. 171.

Required Tasks

(SG-4) What are some important jobs that the beef cattle farmer must do? Why are cattle branded? (12) pp. 9-17;

to succeed. Don't forget to bring to the group any pictures, magazines, or books that you can find on the raising of animals. These will help you to think more accurately.

Informal Discussion (Teacher with group)

What are some of the tasks of the dairy-farmer in caring for his herds of milch cows? A stock-raiser must make somewhat the same provision for his animals. Why does a stock-raiser raise hogs? horses? sheep? beef cattle? How would the job of providing pasture for a herd of six sheep differ from providing pasture for a thousand? In what part of the country would you find large herds? Why?

Pass to the group pictures from Geographic Magazines, and government bulletins on stock-raising. Discuss the co-operational aspects of the pictures.

Service to Others

(29-3) In what ways does the stock-raiser give service to others? You may include the raising and care of any type of domesticated animals in your thinking. (12) pp. 5-4; (7) pp. 35, 27; (8) p. 2.

(#29-3) Make a list of the products which we get from animals. Do not forget the by-products. Use an encyclo-pedia. (6) p. 171.

Required Tasks

(29-4) What are some important jobs that the beef cattle farmer must do? Why are cattle castrated? (12) pp. 5-12;

(6) pp. 171-172; (7) p. 84; (5) pp. 169-173; (11) pp. 53-54; (13) p. 84; (4) p. 56; (4) p. 494; (9) p. 3.

(*SG-5) Make a list of the jobs a farmer must do in (a) raising baby beeves; (b) fattening cattle; (c) keeping barns and animals clean and healthy; (d) providing pasture - fodder, and water; (e) caring for cattle on the range or on the farm; (f) marketing; (g) keeping accounts; (h) preparing for the show ring. (12) pp. 9-17; (5) pp. 169-173; (4) p. 497.

(*SG-6) What part does the government have in regulating stock-raising?

(SG-7) What tasks are required in the raising of horses? (12) pp. 9-17; (10) pp. 127-133; (9) p. 4.

(*SG-8) What are some of the daily tasks in raising horses? How are horses transported to market? How is the price determined? Why is the problem of raising horses and that of raising beef cattle different? (12) pp. 9-17; (4) p. 494.

(SG-9) What is the most common food fed to hogs? Why? Why is selecting good stock of great importance? (12) p. 13; (6) p. 171; (9) p. 88; (5) p. 146; (10) pp. 145-148; (11) p. 58; (2) p. 57; (9) pp. 4-5.

(*SG-10) Why does a hog-raiser "rotate" his pasture land? How does the government supervise hog-raising and marketing? (10) pp. 145-146; (11) p. 58.

(6) pp. 171-172; (7) p. 84; (8) pp. 169-172; (11) pp. 88-89; (12) p. 84; (4) p. 80; (4) p. 104; (4) p. 3.

(450-5) Make a list of the jobs a farmer must do in (a) raising baby beeves; (b) fattening cattle; (c) keeping barns and animals clean and healthy; (d) providing pasture - fodder, and water; (e) caring for cattle on the range or on the farm; (f) marketing; (g) keeping accounts; (h) preparing for the show ring. (12) pp. 9-17; (5) pp. 165-172; (4) p. 407.

(450-6) What part does the government have in regulating stock-raising?

(30-7) What tasks are required in the raising of horses? (12) pp. 9-17; (10) pp. 127-133; (3) p. 4.

(450-8) What are some of the daily tasks in raising horses? How are horses transported to market? How is the price determined? Why is the problem of raising horses and that of raising beef cattle different? (12) pp. 9-17; (4) p. 422.

(50-9) What is the most common food fed to hogs? Why? Why is raising good stock of great importance? (12) p. 12; (6) p. 171; (8) p. 87; (4) p. 146; (10) pp. 135-142; (11) p. 88; (9) p. 97; (3) pp. 1-3.

(450-10) Why does a hog-raiser "rotate" his pasture land? How does the government supervise hog-raising and marketing? (10) pp. 146-148; (11) p. 88.

(SG-11) How are sheep cared for in regard to (a) housing; (b) pasture; (c) fodder; (d) keeping sheep clean; (e) shearing? (12) pp. 9-17; (10) pp. 152-154; (11) p. 58; (9) pp. 8-10.

Advantages and Disadvantages

(SG-12) What advantage does stock-raising offer in regard to health? independence? using initiative? making money? Give reasons for your answers. (12) p. 22; (13) p. 85; (4) p. 499; (9) pp. 13-14; (3) p. 43.

(*SG-13) How does the Department of Agriculture aid the stock-raiser? (2) p. 17; (3) p. 43.

(SG-14) What three disadvantages do you think make stock-raising undesirable? What are your reasons? (12) pp. 21-22; (13) p. 85; (9) p. 16; (3) p. 43.

Training

(SG-15) Suppose you were interested in stock-raising. What would be a good way to learn about it? Why? Why is a college course desirable for the owner or manager? (12) pp. 19-21; (4) pp. 493-494, 496;

(*SG-16) Look up the courses in animal husbandry offered at an agricultural college. What studies are included?

Financial Returns

(SG-17) Try to find out the earnings of the manager of a large western ranch. How much would a helper receive? If

(SB-11) How are sheep cared for in regard to (a) housing; (b) pasture; (c) fodder; (d) keeping sheep clean; (e) shearing? (18) pp. 8-17; (30) pp. 182-184; (11) p. 68; (8) pp. 5-10.

Advantages and Disadvantages

(SB-12) What advantage does stock-raising offer in regard to health; independence; using initiative; making money? Give reasons for your answers. (18) p. 22; (13) p. 55; (4) p. 492; (9) pp. 13-14; (3) p. 46.

(*SB-13) How does the Department of Agriculture aid the stock-raiser? (8) p. 17; (3) p. 46.

(SB-14) What three disadvantages do you think make stock-raising undesirable? What are your reasons? (18) pp. 21-22; (13) p. 55; (9) p. 16; (3) p. 46.

Training

(SB-15) Suppose you were interested in stock-raising. What would be a good way to learn about it? Why? Why is a college course desirable for the owner or manager? (18) pp. 18-21; (4) pp. 492-494, 496;

(*SB-16) Look up the courses in animal husbandry offered at an agricultural college. What studies are included?

Financial Returns

(SB-17) Try to find out the earnings of the manager of a large western ranch. How much would a helper receive? If

you cannot find this information, see your teacher about it. (12) p. 21; (4) p. 496; (3) p. 43.

(*SG-18) Upon what factors would the income of a stock-raiser depend? (12) pp. 21-22; (4) p. 500.

Abilities Needed

(SG-19) Give reasons why the stock-raiser should be able to: (a) judge stock; (b) handle animals; (c) co-operate with others. (12) pp. 18-19; (6) p. 171; (1) pp. 244-245; (2) p. 57; (4) pp. 493, 498-499. (3) p. 43.

(*SG-20) The stock-raiser needs other abilities. What abilities do the following statements indicate? (a) Mr. Jones made a good profit on his beef cattle. A week later Mr. M. has to sell at a loss; (b) Mr. B. wrote to the experiment station requesting suggestions for the prevention of a certain insect pest among his cattle. The workers suggested certain aids with which he might experiment. After several months he had fine results. (c) Mr. H. has been in the stock-raising business a number of years. When customers buy stock from Mr. H. they are always satisfied. Other stock-raisers wonder why Mr. H. is so successful. (d) Mr. A. neglected to repair the sheep sheds. Some months later the cold and storm brought heavy losses to Mr. A's herd of sheep. (e) Mr. C. knows just how much his stock costs from month to month.

(SG-21) When you have completed the required work for

you cannot find this information, see your teacher about it. (12) p. 21; (4) p. 428; (5) p. 43.

(429-19) Upon what factors would the income of a stock-raiser depend? (12) pp. 21-22; (4) p. 50.

Abilities Needed

(29-10) Give reasons why the stock-raiser should be able to: (a) judge stock; (b) handle animals; (c) co-operate with others. (12) pp. 18-19; (8) p. 171; (1) pp. 244-245; (2) p. 57; (4) pp. 423, 429-429. (3) p. 43.

(430-20) The stock-raiser needs other abilities. What abilities do the following statements indicate? (a) Mr. Jones made a good profit on his beef cattle. A week later Mr. X. has to sell at a loss; (b) Mr. E. wrote to the experiment station requesting suggestions for the prevention of a certain insect pest among his cattle. The workers suggested certain aids with which he might experiment. After several months he had fine results. (c) Mr. E. has been in the stock-raising business a number of years. When occasions buy stock from Mr. H. they are always satisfied. Other stock-raisers wonder why Mr. E. is so successful. (d) Mr. A. neglected to repair the barn roofs. Some months later the cold and storm brought heavy losses to Mr. A's herd of sheep. (e) Mr. C. knows just how much his stock costs from month to month.

(30-21) When you have completed the required work for

your group, write it up in brief form and hand it to your teacher. You may then choose any optional activities from the card file.

References

1. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

2. Davis, Frank G. and Davis, B. Carnall, Guidance for Youth, Ginn and Co., Boston, Mass., 1928.

3. Filene, Catharine, Careers for Women, Houghton Mifflin Co., New York, N. Y., 1934.

4. Fleischman, Doris E., An Outline of Careers for Women, Doubleday, Doran and Co., Garden City, N. Y., 1931.

5. Gowin, Enoch Burton, Wheatley, William Alonzo, and Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1923.

6. Hill, Howard C., Vocational Civics, Ginn and Co., Boston, Mass., 1928.

7. Holbrook, Harold Lyman, and MacGregor, A. Laura, Our World of Work, Allyn and Bacon, Boston, Mass., 1929.

8. Lane, Mary Rogers, Vocations in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1929.

9. Monograph No. 20, Animal Husbandry as a Career, The Research Institute, Chicago, Ill., 1931.

10. Power, R. A. and Kivlin, Vincent Earl, Handbook of Farming for Boys and Girls, E. M. Hale Co., Milwaukee, Wis., 1937.

11. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

12. Success Pamphlet, Stock Raising, Monograph Vocational Information Series, Directed by Charles Shade, Morgan-Dillon, Publishers, 1937.

your group, write it up in brief form and hand it to your teacher. You may then choose any optional activities from the card file.

References

1. Brewer, John M., Occupations. Ginn and Co., Boston, Mass., 1930.

2. Davis, Frank G. and Davis, E. Carnall, Guidance for Youth. Ginn and Co., Boston, Mass., 1930.

3. Filene, Catherine, Careers for Women. Houghton Mifflin Co., New York, N. Y., 1934.

4. Jaisohman, Doris E., An Outline of Careers for Women. Doubleday, Doran and Co., Garden City, N. Y., 1931.

5. Rowin, Enoch Burton, Wheatley, William Alonzo, and Brewer, John M., Occupations. Ginn and Co., Boston, Mass., 1932.

6. Hill, Howard C., Vocational Civics. Ginn and Co., Boston, Mass., 1928.

7. Holbrook, Harold Lyman, and Hoadmaster, A. Leura, Our World of Work. Allyn and Bacon, Boston, Mass., 1933.

8. Lane, Mary Elmore, Lessons in Industry, Vol. I, International Textbook Co., Scranton, Pa., 1934.

9. Longstreet, Wm. Ed., Animal Husbandry as a Career. The Research Institute, Chicago, Ill., 1931.

10. Power, E. A. and Kivlin, Vincent Earl, Handbook of Health for Boys and Girls. S. M. Hale Co., Milwaukee, Wis., 1937.

11. Proctor, William Kurtzin, Vocations. Houghton Mifflin Co., New York, N. Y., 1932.

12. Success Pamphlet, Stock Raising, Longman Vocational Information Series, Directed by Charles Shade, Publication, Publishers, 1927.

13. Zeigler, Samuel H. and Jacquette, Helen, Choosing an Occupation, John C. Winston Co., Philadelphia, Pa., 1924.

Note: Many books do not discuss the occupation of stock-raising except as a part of general farming. Be sure to include some of the books on general farming in your reading.

Optional Activities

1. Have you ever read thrilling cowboy stories of almost unbelievable facts? Why would such a story be less true today in describing the life on a ranch?

2. Write to the Department of Agriculture in the corn states or the grazing states for information about stock-raising.

3. Collect pictures on stock-raising and mount them. Write labels that will bring out one important feature of the picture.

4. Read the article in the Reader's Digest for October, 1937 entitled "Sheep Come First". Make a report on the article.

5. Make a chart showing the products for which we depend on the stock-raiser.

6. Make an exhibit to go with the chart referred to in (5). You will be surprised at the large number of products you must assemble.

13. Zeigler, Samuel H. and Jacquette, Helen. Choosing an occupation. John C. Winston Co., Philadelphia, Pa., 1924.

Note: Many books do not discuss the occupation of stock-raising except as a part of general farming. Be sure to include some of the books on general farming in your reading.

Optional Activities

1. Have you ever read thrilling cowboy stories of almost unbelievable feats? Why would such a story be less true today in describing the life on a ranch?

2. Write to the Department of Agriculture in the corn states or the grazing states for information about stock-raising.

3. Collect pictures on stock-raising and mount them. Write labels that will bring out one important feature of the picture.

4. Read the article in the Reader's Digest for October, 1927 entitled "Shoes Does Tract". Make a report on the article.

5. Make a chart showing the products for which we depend on the stock-raiser.

6. Make an exhibit to go with the chart referred to in (5). You will be surprised at the large number of products you must assemble.

7. Make a map of the cattle-raising areas. Show topography and rainfall.

8. Draw a picture of a sheep shed.

9. Write a letter that you might send to a stock-raiser asking why the stock-fair and show-ring are considered so important. Answer the letter. Make your arguments convincing.

10. Write an ad for a western paper. You are looking for a young man to be a shepherd for your herd. Choose your words carefully.

11. Write an answer to the advertisement. Your English teacher will help. State your qualifications.

12. Draw a scene at a stock-judging contest.

13. Pretend that you are an inspector of beef cattle. Stage an interview with a farmer that has been careless of his stock; with a farmer that has cared for his stock scientifically.

14. Do you know any cowboy or western songs? poems? If so, copy them in your notebook. Have you read any stories or books in which care for sheep, goats, or cattle are depicted? Where did the story take place? Planto tell the class about it.

15. Make a notebook on stock-raising. There is so much to learn that you will have to choose reports and illustrations wisely.

7. Make a map of the cattle-raising areas. Show topography and rainfall.

8. Draw a picture of a sheep shed.

9. Write a letter that you might send to a stock-raiser asking <u>why</u> the stock-fair and show-ring are considered so important. Answer the letter. Make your arguments convincing.

10. Write an ad for a western paper. You are looking for a young man to be a shepherd for your herd. Choose your words carefully.

11. Write an answer to the advertisement. Your English teacher will help. State your qualifications.

12. Draw a scene at a stock-judging contest.

13. Pretend that you are an inspector of beef cattle. Stage an interview with a farmer that has been careless of his stock; with a farmer that has cared for his stock satisfactorily.

14. Do you know any cowboy or western songs? poems? If so, copy them in your notebook. Have you read any stories or books in which cows for sheep, goats, or cattle are dominant? Where did the story take place? Please tell the class about it.

15. Make a notebook on stock-raising. There is so much to learn that you will have to choose reports and illustrations wisely.

16. Look up the account of animal husbandry in the ancient days. The Old Testament stories in the Bible depict the methods of the old days very graphically. Read about the herdsmen and cattle owners of Arabia and Persia. Illustrate some of these reports.

17. Plan an exhibit of pictures, books, notebooks, and, if possible, models, which depict sheep raising.

Class Presentation Period

The members of the group will give reports to the class on the study of this occupation.

Present your optional activities to the class. Make your presentation enthusiastic and full of interesting information.

Test

Only members of the group which studied the stock-raiser will take the test.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

*The stock-raiser maintains high quality of stock by first of all 1.....

a) feeding animals balanced rations.
b) selecting only the finest stock.
c) providing adequate pasture.
d) care in transportation.

16. Look up the account of animal husbandry in the ancient days. The Old Testament stories in the Bible depict the methods of the old days very graphically. Read about the herdsmen and cattle owners of Arabia and Persia. Illustrate some of these reports.

17. Plan an exhibit of pictures, books, notebooks, and if possible, models, which depict sheep raising.

Class Presentation Period

The members of the group will give reports to the class on the study of this occupation.

Present your optional activities to the class. Make your presentation enthusiastic and full of interesting information.

Test

Only members of the group which studied the stock-raiser will take the test.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The stock-raiser maintains high quality of stock by first of all ..... I.....

a) feeding animals balanced rations.
b) selecting only the finest stock.
c) providing adequate pasture.
d) care in transportation.

The show-ring and stock-fair are important to the young stock-raiser 2.....

a) to make money and to have some fun.
b) to meet friends and discuss business.
c) to find out how to judge stock and where to buy fine stock.
d) to learn what new labor saving devices the manufacturers have to offer.

To the highly experienced stock-breeder, the show-ring is most important 3.....

a) as a place to show his finest stock and thereby make a reputation.
b) as a place to gamble on prize-winning stock.
c) as a place to learn about stock-raising.
d) as a place to meet those interested in stock.

Cowboy stories of the wild west 4.....

a) are just as true today as they were fifty years ago.
b) are less true today than formerly.
c) have always been imaginative.
d) have nothing in common with stock ranches of today.

*The hog-raiser rotates his pasture mainly because 5.....

a) the pasture land cannot give enough feed for long.
b) the pasture is not large enough to use for a long time.
c) this is one way to prevent the infection of hogs.
d) hogs must use corn fields for pasture.

*It is becoming more necessary to provide smaller ranges for cattle herds on the ranches because 6.....

a) the cattle may get lost on large ranges.
b) the grazing land is getting scarce.
c) the cattle are not healthy when allowed to run wild.
d) it makes the round-up too difficult.

The show-ring and stock-fair are important to the young stock-raiser 2.....

a) to make money and to have some fun.
b) to meet friends and discuss business.
c) to find out how to judge stock and where to buy fine stock.
d) to learn what new labor saving devices the manufacturers have to offer.

To the highly experienced stock-breeder, the show-ring is most important 3.....

a) as a place to show his finest stock and thereby make a reputation.
b) as a place to gamble on prize-winning stock.
c) as a place to learn about stock-raising.
d) as a place to meet those interested in stock.

Cowboy stories of the wild west 4.....

a) are just as true today as they were fifty years ago.
b) are less true today than formerly.
c) have always been imaginative.
d) have nothing in common with stock ranches of today.

The hog-raiser rotates his pasture mainly because 5.....

a) the pasture land cannot give enough feed for long.
b) the pasture is not large enough to use for a long time.
c) this is one way to prevent the infection of hogs.
d) hogs must use corn fields for pasture.

It is becoming more necessary to provide smaller ranges for cattle herds on the ranches because 6.....

a) the cattle may get lost on large ranges.
b) the grazing land is getting scarce.
c) the cattle are not healthy when allowed to roam wild.
d) it makes the round-up too difficult.

*Another reason for fencing smaller ranges is 7.....

a) it has been found that regular feeding means meat of a higher standard.
b) it has been found that cold winters on the range cause more loss now than formerly.
c) cowboys prefer small ranges.
d) the cost of regular feeding is too high.

*The main reason why an agricultural college course is the best preparation is that 8.....

a) many successful stock-raisers have taken the course and recommend it highly.
b) it makes further unnecessary if one has some knowledge of stock-farming.
c) the graduate has a better chance to make friends among stock-raisers who have had similar training.
d) new methods and treatments are being discovered through scientific experiments, and learning of these under instruction saves many mistakes.

The stock-raiser's greatest problem is 9.....

a) to find enough pasture land.
b) to determine the right kind and amount of feed for the animals.
c) to prevent loss through disease and insect pests which are common to animals.
d) to transport animals to market.

Many young farmers find it difficult to undertake stock-raising as a specialized occupation because 10.....

a) it is hard to get good stock.
b) there are so many stock-raisers that the chance to make money is small.
c) it is difficult to get grazing land since so much is being irrigated and used for crops.
d) a large amount of capital is required to start a farm with high grade stock.

Another reason for fencing smaller ranges is 7.....

a) it has been found that regular feeding means meat of a higher standard.
b) it has been found that cold winters on the range cause more loss now than formerly.
c) cowboys prefer small ranges.
d) the cost of regular feeding is too high.

The main reason why an agricultural college course is the best preparation is that 8.....

a) many successful stock-raisers have taken the course and recommend it highly.
b) it makes further unnecessary if one has some knowledge of stock-farming.
c) the graduate has a better chance to make friends among stock-raisers who have had similar training.
d) new methods and treatments are being discovered through scientific experiments, and learning of these under instruction saves many mistakes.

The stock-raiser's greatest problem is 9.....

a) to find enough pasture land.
b) to determine the right kind and amount of feed for the animals.
c) to prevent loss through diseases and insect pests which are common to animals.
d) to transport animals to market.

Many young farmers find it difficult to undertake stock-raising as a specialized occupation because 10.....

a) it is hard to get good stock.
b) there are so many stock-raisers that the chance to make money is small.
c) it is difficult to get grazing land since so much is being irrigated and used for crops.
d) a large amount of capital is required to start a farm with high grade stock.

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The stock-raiser is important because he supplies some of the materials for (1) and (2). 1..... 2.....

*Scientific principles of (3) have changed methods of stock-raising. 3.....

Large herds of cattle are common in the (4) states. 4.....

Only those who have real (5) for, and understanding of animals should enter this work. 5.....

The work requires great (6) energy, and, for this reason, (7) women have entered this field. 6..... 7.....

The actual work will depend upon the (8) of animals raised. 8.....

Some beef cattle farmers specialize in raising and selling small (9) beeves. 9.....

These stock-raisers may buy cattle, (10) them for market, and thus make good profit. 10.....

1. baby	7. heavy	13. type
2. many	8. food	14. size
3. physical	9. eastern	15. clothing
4. fatten	10. few	16. test
5. breeding	11. western	17. buildings
6. fondness	12. health	

Test

Upon the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The stock-raiser is important because he supplies some of the materials for ___(1)___ and ___(2)___. 1.....

2.....

Scientific principles of ___(3)___ have changed methods of stock-raising. 3.....

Large herds of cattle are common in the ___(4)___ states. 4.....

Only those who have real ___(5)___ for, and understanding of animals should enter this work. 5.....

The work requires great ___(6)___ energy, and, for this reason, ___(7)___ women have entered this field. 6.....

7.....

The actual work will depend upon the ___(8)___ of animals raised. 8.....

Some dairy cattle farmers specialize in raising and selling small ___(9)___ heifers. 9.....

These stock-raisers buy dry cattle, ___(10)___ them for market, and thus make good profit. 10.....

1. dairy	7. heavy	13. type
2. dairy	8. food	14. size
3. physical	9. eastern	15. clothing
4. labor	10. few	16. test
5. breeding	11. western	17. buildings
6. fondness	12. health	

As in other types of animal husbandry

(11) of animals and houses is important. 11.....

The stock-raiser must provide (12) 12.....

pasture land for the herd.

Accurate (13) must be kept of the 13.....

cost of feed, care, and transportation.

Home grown fodder is more (14) than 14.....

the commercial fodder.

Farmers may get (15) to use public 15.....

lands for grazing.

The stock farm must be ready for govern-

ment (16) at any time. 16.....

Horses must have well-constructed (17) 17.....

that are kept clean.

A (18) treats sick animals. 18.....

The stock-raiser must (19) and curry 19.....

horses daily.

The hog-raiser must guard against

(20) and infection. 20.....

1. groom	7. expensive	13. ranges
2. permits	8. cleanliness	14. adequate
3. very distant	9. demands	15. records
4. disease	10. inspection	16. rich
5. clean	11. clip	17. veterinarian
6. lists	12. barns	18. economical
		19. physician

As in other types of animal husbandry

(11) of animals and manure is important. 11.....

The stock-raiser must provide (12) 12.....

pasture land for the herd.

Hayfields (13) must be less of the 13.....

cost of feed, care, and transportation.

Home grown fodder is more (14) than 14.....

the commercial fodder.

Farmers may not (15) to use mobile 15.....

hands for cranking.

The stock farm must be ready for improvement (16) at any time. 16.....

Houses must have well-constructed (17) 17.....

that are kept clean.

A (18) treats sick animals. 18.....

The stock-raiser must (19) and carry 19.....

horses daily.

The hog-raiser must guard against

(20) and infection. 20.....

1. Crops
2. Dairies
3. very distant
4. diseases
5. clean
6. Jobs

7. expensive
8. cleanliness
9. demands
10. inspection
11. cats
12. barns

13. farmers
14. adequate
15. records
16. risk
17. veterinarian
18. economical
19. physician

It is particularly important that hogs, pens, and (21) be kept clean. 21.....

The man who cares for large flocks of sheep is called a (22). 22.....

Shearing is done just before the (23) season by (24) concerns. 23..... 24.....

Dipping is one method of (25) the sheep. 25.....

Sheep barns are open on the (26) side. 26.....

When extensive grazing areas are used in the west it is often necessary to construct (27) places and feed (28) sheds. 27..... 28.....

The stock-raiser usually lives (29) large population areas. 29.....

The stock-raiser has an opportunity to (30) with various methods of breeding and caring for cattle. 30.....

The United States Department of Agriculture has made important (31) in this field. 31.....

The use of manure for (32) gives the farmer the chance to enrich the soil at no expense. 32.....

1. summer	7. pasture	13. far from
2. watering	8. storage	14. shepherd
3. fertilizer	9. winter	15. sheep
4. south	10. shearing	16. studies
5. pasture	11. West	17. cleaning
6. experiment	12. shearing	18. fairly near

It is particularly important that hogs, cows, and _____ (21) be kept clean. 21.....

The man who cares for large flocks of sheep is called a _____ (22). 22.....

Shearing is done just before the _____ (23) season by _____ (24) concerns. 23.....
24.....

Dipping is one method of _____ (25) the sheep. 25.....

Sheep barns are open on the _____ (26) side. 26.....

Then extensive grazing areas are used in the west. It is often necessary to construct _____ (27) fences and feed _____ (28) sheds. 27.....
28.....

The stock-raiser usually lives _____ (29) large population areas. 29.....

The stock-raiser has an opportunity to _____ (30) with various methods of breeding and caring for cattle. 30.....

The United States Department of Agriculture has made important _____ (31) in this field. 31.....

The use of manure for _____ (32) gives the farmer the chance to enrich the soil at no expense. 32.....

1. treasure	7. pasture	13. far from
2. weaning	8. storage	14. shepherd
3. fertilizer	9. winter	15. sheep
4. south	10. shearing	16. stables
5. pastures	11. west	17. cleaning
6. arrangement	12. sheering	18. fairly near

CHAPTER XI

THE FORESTER

The Unit

The work of the forester includes the care and management of forest areas. It is his duty to see that the resources of the forest are used to the greatest advantage of all concerned. His program of work includes (a) the conservation of trees, plants, game, birds, and fish; (b) the supervision of numerous activities which may be carried on in the forest, such as cattle grazing, lumbering, and various forms of recreation; and (c) the improvement of forest lands through such means as reforestation, the construction of trails, lookouts, bridges, and roads. A knowledge of technical forestry must be combined with broad practical experience. This worker must be physically fit to perform heavy manual labor under all sorts of conditions, and mentally qualified to carry on scientific investigations and experiments of a highly technical nature. Self-reliance and resourcefulness are essential, for he must often meet and solve problems alone in an isolated section of the forest. The well-trained forester will have a good income, but his greatest satisfaction will come from the knowledge that he

CHAPTER XI

THE FORESTER

The Unit

The work of the forester includes the care and management of forest areas. It is his duty to see that the resources of the forest are used to the greatest advantage of all concerned. His program of work includes (a) the conservation of trees, plants, game, birds, and fish; (b) the supervision of numerous activities which may be carried on in the forest, such as cattle grazing, lumbering, and various forms of recreation; and (c) the improvement of forest lands through such means as reforestation, the construction of trails, lookouts, bridges, and roads. A knowledge of technical forestry must be combined with broad practical experience. This worker must be physically fit to perform heavy manual labor under all sorts of conditions, and mentally qualified to carry on scientific investigations and experiments of a highly technical nature. Self-reliance and resourcefulness are essential, for he must often meet and solve problems alone in an isolated section of the forest. The well-trained forester will have a good income, but his greatest satisfaction will come from the knowledge that he

may render public service that is of untold benefit to the present and future citizens of our country.

(Approximate time allotment - six periods)

The Delimitation

Service to Others

1. The forester preserves our forest lands by regulating the cutting down of trees and the reforestation of suitable areas.

2. Through his supervision, the forest serves the people who need it. These may include (a) cattle and sheep raisers, whose herds may graze on certain areas; (b) lumber dealers; (c) people who seek rest and recreation; (d) natural scientists who wish to study any form of nature; (e) residents who have private homes in the forest area.

3. The forest, when carefully managed and supervised, provides valuable products, including lumber, turpentine, fish, and game. We may say that the forest supplies materials basic to our modern civilization.

4. The forest prevents valuable soil from being washed away. It acts as a reservoir in times of heavy rains and melting snows, thus reducing the danger of floods and drought. Forests serve as windbreaks in time of storms.

5. The opportunities for forestry work are increasing as the public becomes more informed as to the necessity and

may render public service that is of untold benefit to the present and future citizens of our country.

(Approximate time allotment - six periods)

The Delimitation

Service to Others

1. The forester preserves our forest lands by regulating the cutting down of trees and the reforestation of suitable areas.

2. Through his supervision, the forest serves the people who need it. These may include (a) cattle and sheep raisers, whose herds may graze on certain areas; (b) lumber dealers; (c) people who seek rest and recreation; (d) natural scientists who wish to study any form of nature; (e) residents who have private homes in the forest area.

3. The forest, when carefully managed and supervised, provides valuable products, including lumber, turpentine, fish, and game. We may say that the forest supplies materials basic to our modern civilization.

4. The forest prevents valuable soil from being washed away. It acts as a reservoir in times of heavy rains and melting snows, thus reducing the danger of floods and drought. Forests serve as windbreaks in time of storms.

5. The opportunities for forestry work are increasing as the public becomes more informed as to the necessity and

wisdom of conserving our trees and forest lands.

6. Trees are beautiful. The forester saves these from destruction. They may line streets and boulevards, or decorate home grounds and private estates. In this way the forester adds to the beauty of home surroundings.

Required Tasks

*1. The United States Forest Service employs men in the following positions: (a) Forest Guard; (b) Field Assistant; (c) Junior Range Examiner; (d) Junior Forester; (e) Forest Ranger; (f) Assistant Range Examiner; (g) Assistant Forester; (h) Associate Range Examiner; (i) Associate Forester; (j) Chief Lumberman; (k) Logging Engineers; (l) Assistant Forest Supervisor; (m) Forest Supervisor; (n) Head Forester.

*2. In addition to the positions in the United States Forest Service, trained foresters are employed by 1) cities and towns; 2) lumber companies; 3) Mining corporations and Railroad companies; 4) owners of private estates; 5) State Departments of Forestry; 6) Educational Institutions; 7) Research departments in industries; 8) wood working industries.

*3. The forest ranger who has the required technical training may be promoted to supervisory positions. The work of the Forest Ranger is therefore representative of the type of work which men in forestry positions must be able to do.

wisdom of conserving our trees and forest lands.

5. Trees are beautiful. The forester saves these from destruction. They may line streets and boulevards, or decorate home grounds and private estates. In this way the forester adds to the beauty of home surroundings.

Required Tests

#1. The United States Forest Service employs men in the following positions: (a) Forest Guard; (b) Field Assistant; (c) Junior Range Examiner; (d) Junior Forester; (e) Forest Ranger; (f) Assistant Range Examiner; (g) Assistant Forester; (h) Associate Range Examiner; (i) Associate Forester; (j) Chief Lumberman; (k) Logging Engineers; (l) Assistant Forest Supervisor; (m) Forest Supervisor; (n) Head Forester.

#2. In addition to the positions in the United States Forest Service, trained foresters are employed by 1) cities and towns; 2) lumber companies; 3) mining corporations and railroad companies; 4) owners of private estates; 5) State Departments of Forestry; 6) educational institutions; 7) Research departments in lumberties; 8) wood working industries.

#3. The forest ranger who has the required technical training may be promoted to supervisory positions. The work of the Forest Ranger is therefore representative of the types of work which men in forestry positions must be able to do.

*4. The forest ranger must get information on the trees, shrubs, plants, animal life, birds, and fish which thrive in his forest area.

5. The ranger must build new trails, roads, and bridges that will enable him to cover the ground as fast as possible. He must put up telephone lines for communication in time of need. He builds fences for closing in certain sections.

6. He protects his forest area from fire. This means seeking to prevent fires, by posting signs, putting out small fires and sparks, and supervising the use of camp fire sites.

7. He must patrol his district regularly.

8. He must watch for fires from fire lookout.

9. He keeps trails and telephone lines clear.

10. He must see that tools are in working condition and easily available.

11. He directs assistants and volunteers.

12. The ranger must keep a sharp lookout for timber thieves.

13. He must be sure that men using forest lands must have permits to do so.

14. Where free timber is supplied, the ranger must check the quantity given and the use made of it.

15. He issues permits for the use of forest or its resources.

4. The forest ranger must get information on the trees, shrubs, plants, animal life, birds, and fish which thrive in his forest area.

5. The ranger must build new trails, roads, and bridges that will enable him to cover the ground as fast as possible. He must put up telephone lines for communication in time of need. He builds fences for closing in certain sections.

6. He protects his forest area from fire. This means seeking to prevent fires, by posting signs, putting out small fires and sparks, and supervising the use of camp fire sites.

7. He must patrol his district regularly.

8. He must watch for fires from fire lookout.

9. He keeps trails and telephone lines clear.

10. He must see that tools are in working condition and easily available.

11. He directs emergencies and volunteers.

12. The ranger must keep a sharp lookout for timber thieves.

13. He must be sure that men taking forest lands must have permits to do so.

14. Where free timber is supplied, the ranger must check the quantity given and the use made of it.

15. He issues permits for the use of forest or its resources.

16. He may instruct lumbermen concerning what trees to cut so that the forest may be saved. He supervises the cutting of diseased trees.

17. The forest ranger must keep watch over the use made of grazing lands. He must be informed concerning brands of different herds, and *must understand something of the business of cattle-raising.

18. The ranger must know and enforce fish and game laws.

19. He must mark timber, scale logs, and estimate the value of lumber. He may also sell timber.

20. He must make reports to the forest supervisor.

*21. He must be ready to furnish his own uniform, arrange for own means of transportation, and furnish equipment for personal use. He must pay his own traveling expenses to whatever forest he is assigned.

22. He must fight fires, calling for assistance when necessary, and using best means of preventing spread of the fire.

23. The <u>forest guard</u> assists the forest ranger.

*24. The <u>forest supervisor</u> is the manager of the forest region. He must know the best methods of surveying, mapping, cutting, and preserving the forest. He must contact those who use forest resources, and must draw up necessary regulations. He issues permits, receives bids for purchase of

16. He may instruct lumbermen concerning what trees to cut so that the forest may be saved. He supervises the cutting of diseased trees.

17. The forest ranger must keep watch over the use made of grazing lands. He must be informed concerning breeds of different herds, and must understand something of the business of cattle-raising.

18. The ranger must know and enforce fish and game laws.

19. He must mark timber, scale logs, and estimate the value of lumber. He may also sell timber.

20. He must make reports to the forest supervisor.

21. He must be ready to furnish his own uniform, arrange for own means of transportation, and furnish equipment for personal use. He must pay his own traveling expenses to wherever forest he is assigned.

22. He must light fires, calling for assistance when necessary, and using best means of preventing spread of the fire.

23. The forest guard assists the forest ranger.

24. The forest supervisor is the manager of the forest region. He must know the best methods of surveying, mapping, cutting, and preserving the forest. He must contact those who use forest resources, and must draw up necessary regulations. He issues permits, receives bids for purchase of

timber, and keeps account of forest workers, value of timber, improvements made in his forest, uses to which forest is put, and the losses which the forest has suffered. He must make reports to the Forestry Service. He directs and supervises the work of the forest rangers. For this reason his time is divided between office and field work. He must keep accounts, make the best use of public money. He must keep on friendly terms with all concerned. He must plan years ahead in his improvement and conservation program.

*25. The State Forester must educate the citizens of the state to recognize the value of forests. He must help to secure good forestry laws, and supervise the planning of forest areas. He must study the local need, write bulletins and articles, and supervise methods of controlling and preventing fires. He is in charge of State forest nurseries. He directs the work of the rangers or assistants.

26. In whatever position the trained forester is employed, his work will include an understanding of the jobs listed, whether he actually does the work himself, supervises others, interprets the reports from the foresters, or plans improvement or extension programs. (For any further detail the student may consult the United States Forest Service Bulletins)

Advantages and Disadvantages

1. The work is out-of-doors and entails healthful exercise.

timber, and keeps account of forest workers, value of timber improvements made in his forest, uses to which forest is put, and the losses which the forest has suffered. He must make reports to the Forestry Service. He directs and supervises the work of the forest rangers. For this reason his time is divided between office and field work. He must keep accounts, make the best use of public money. He must keep on friendly terms with all concerned. He must plan years ahead in his improvement and conservation program.

25. The State Forester must educate the citizens of the state to recognize the value of forests. He must help to secure good forestry laws, and supervise the planning of forest areas. He must study the local need, write bulletins and articles, and supervise methods of controlling and preventing fires. He is in charge of State forest nurseries. He directs the work of the rangers or assistants.

26. In whatever position the trained forester is employed, his work will include an understanding of the jobs listed, whether he actually does the work himself, supervises others, interprets the reports from the forester, or plans improvement or extension programs. (For any further detail the student may consult the United States Forest Service bulletins)

Advantages and Disadvantages

1. The work is out-of-doors and entails healthful exercise.

2. There is a chance to learn new things through observing and studying nature. His surroundings are beautiful.

3. The forester may feel that he is giving valuable service.

4. His work is far from crowded noisy cities, and he works in quiet and calm surroundings.

5. There is a chance for promotion and less strenuous work in the future. The income is good.

6. The work is very interesting. He comes in close contact with nature. The work includes a variety of tasks.

7. The worker meets many problems which challenge his best thinking.

8. United States Forestry Service positions are filled through Civil Service Examinations. This means greater security in office.

9. The work is very strenuous. He must face all sorts of weather conditions.

10. He is isolated from friends and social life. The ranger's hut is usually in the forest where he is stationed. He cannot plan to be at home.

11. He needs a professional education if he is to be in line for a promotion. This means an investment of money.

12. He meets many hardships, and a large part of his job is heavy manual labor.

13. The silence of the forest may make him feel

2. There is a chance to learn new things through observing and studying nature. His surroundings are beautiful.

3. The forester may feel that he is giving valuable service.

4. His work is far from crowded noisy cities, and he works in quiet and calm surroundings.

5. There is a chance for promotion and less strenuous work in the future. The income is good.

6. The work is very interesting. He comes in close contact with nature. The work includes a variety of tasks.

7. The worker meets many problems which challenge his best thinking.

8. United States Forestry Service positions are filled through Civil Service Examinations. This means greater security in office.

9. The work is very strenuous. He must face all sorts of weather conditions.

10. He is isolated from friends and social life. The rangers's but is usually in the forest where he is stationed. He cannot plan on be at home.

11. He needs a professional education if he is to be in line for a promotion. This means an investment of money.

12. He meets many hardships, and a large part of his job is heavy manual labor.

13. The alliance of the Forest may make him feel

lonesome at times.

14. He must pay his own traveling expenses and provide his own uniforms and personal equipment, and must be willing to go to any region that the forest service wishes to send him.

15. He furnishes his own means of transportation in the forest.

16. Some of the work, such as fire fighting, is dangerous.

17. The life of a forester offers few of the modern conveniences.

Training

1. The professional training of a forester should include an agricultural college course with two years of graduate study in a school of forestry. *Science, mechanical drawing, and mathematics are important subjects. The course in forestry includes practical work in the forest.

2. United States foresters received beginning positions through competitive examinations, usually known as Civil Service. Higher positions are filled through promotion.

3. For work outside the United States Forest Service, similar training is required.

Financial Returns

The forest ranger, employed by the United States Forest

lonesome at times.

14. He must pay his own traveling expenses and provide his own uniforms and personal equipment, and must be willing to go to any region that the forest service wishes to send him.

15. He furnishes his own means of transportation in the forest.

16. Some of the work, such as fire fighting, is dangerous.

17. The life of a forester offers few of the modern conveniences.

Training

1. The professional training of a forester should include an agricultural college course with two years of graduate study in a school of forestry. Science, mechanical drawing, and mathematics are important subjects. The course in forestry includes practical work in the forest.

2. United States foresters receive beginning positions through competitive examinations, usually known as civil service. Higher positions are filled through promotion.

3. For work outside the United States Forest Service, similar training is required.

Financial Returns

The forest ranger, employed by the United States Forest

Service, receives an annual salary of $2000 to $2900. Positions outside the Forestry Service may offer high salaries.

Abilities Needed

*1. The forester should be able to recognize all trees, shrubs, and plant life, not only in name, but also in respect to their use in industry, their means of reproduction, and their relation to temperature, rainfall, soil, and forest conditions.

2. The forester must be able to endure physical hardships, withstand extreme climatic conditions, and to engage in heavy manual work.

3. He must be able to travel alone through the forest night or day, on foot or horseback, without losing his own way. He should be able to enjoy solitude and the quiet of the woods.

4. He needs the ability to think logically and use good judgment.

5. The forester needs business ability for he deals with business men. Business ability will depend, in part, upon knowledge of local conditions and persons.

6. The forester needs the ability to meet new situations with courage, an alert open mind, and an eagerness to do what is for the good of the greatest number.

7. The forester must be able to plan ahead and put his plans into practice, at the same time realizing that final

Service, receives an annual salary of 2000 to 2900. Positions outside the Forestry Service may offer high salaries.

Abilities Needed

1. The forester should be able to recognize all trees, shrubs, and plant life, not only in name, but also in respect to their use in industry, their means of reproduction, and their relation to temperature, rainfall, soil, and forest conditions.

2. The forester must be able to endure physical hardships, withstand extreme climatic conditions, and to engage in heavy manual work.

3. He must be able to travel alone through the forest night or day, on foot or horseback, without losing his own way. He should be able to enjoy solitude and the quiet of the woods.

4. He needs the ability to think logically and use good judgment.

5. The forester needs business ability for he deals with business men. Business ability will depend, in part, upon knowledge of local conditions and seasons.

6. The forester needs the ability to meet new situations with courage, an alert open mind, and an eagerness to do what is for the good of the greatest number.

7. The forester must be able to plan ahead and put his plans into practice, at the same time realizing that final

fulfillment will take years of constructive effort.

8. He must be able to direct others, maintaining high standards of work and planning. He must be willing to take responsibility for his decisions.

*9. He should have the ability to notice many things. Indeed, the power of keen observation is absolutely essential. Such observation should lead him to seek for explanations of a situation, help him diagnose any difficulty, and determine his action accordingly.

10. He must be able to put public service above selfish interest, and loyalty before personal gain.

Unit Assignment

(Approximate time allotment - six periods)

This unit assignment is designed for optional group work.

(The work of the forester is appealing to boys and girls. The United States Forestry Service has attempted to teach the need for conservation through the use of photographs, motion picture films, and slides. The wise use of these aids will help greatly in teaching this unit. Considerable reading material is available in libraries, through government bulletins and texts.)

(SG-1) The first thing to do is to organize your group. Choose a chairman and a secretary. The chairman

fulfillment will take years of constructive effort.

d. He must be able to direct others, maintaining high standards of work and planning. He must be willing to take responsibility for his decisions.

e. He should have the ability to notice many things. Indeed, the power of keen observation is absolutely essential. Such observation should lead him to seek for explanations of a situation, help him diagnose any difficulty, and determine his action accordingly.

f. He must be able to put public service above selfish interest, and loyalty before personal gain.

Unit Assignment

(Approximate time allotment - six periods)

This unit assignment is designed for optional group work.

(The work of the forester is appealing to boys and girls. The United States Forestry Service has attempted to teach the need for conservation through the use of photographs, motion picture films, and slides. The wise use of these aids will help greatly in teaching this unit. Considerable reading material is available in libraries, through government bulletins and texts.)

(Sp-1) The first thing to do is to organize your group. Choose a chairman and a secretary. The chairman

will preside over group discussions and assign individual work. The secretary will keep a record of group discussions and assignments.

(SG-2) Look over the materials you have on hand, including books, pictures, charts, and bulletins.

Service to Others

(SG-3) A part of the forester's work is preventing and controlling forest fires. He gives other services, too. List the ways in which the forester serves the nation as well as individuals. (1) pp. 258-259; (2) pp. 100-101; (7) pp. 177-179; (9) pp. 104-106; (5) p. 1; (11) pp. 19-30; (12) p. 68; (10) p. 1; (13) pp. 170-171; (14) p. 35.

(*SG-4) The forest gives us many products. Many of the things we use daily come from forest products. What are some of these products? (5) p. 65; (10) p. 1; (2) p. 109.

(SG-5) How may a forester serve city people? (9) pp. 100-104; (14) p. 8.

Required Tasks

(*SG-6) What are some of the positions in the United States Forestry Service? (2) pp. 103-104; (11) pp. 89-106; (10) pp. 2-3, 17; (14) pp. 7-8.

(*SG-7) What are some types of positions open outside the United States Forestry Service? (1) p. 259; (7) p. 182; (2) p. 104; (11) pp. 106-116; (12) p. 69; (5) pp. 72-73; (10) pp. 4-5; (14) p. 8.

will preside over group discussions and assign individual work. The secretary will keep a record of group discussions and assignments.

(34-3) Look over the materials you have on hand, including books, pictures, charts, and bulletins.

Service to others

(35-5) A part of the forester's work is preventing and controlling forest fires. He gives other services, too. List the ways in which the forester serves the nation as well as individuals. (1) pp. 288-289; (2) pp. 100-101; (7) pp. 177-178; (9) pp. 104-106; (8) p. 1; (11) pp. 18-30; (12) p. 88; (10) p. 1; (13) pp. 170-171; (14) p. 35.

(36-1) The forest gives us many products. Many of the things we use daily come from forest products. What are some of these products? (3) p. 65; (10) p. 1; (2) p. 102.

(36-5) How may a forester serve city people? (2) pp. 100-104; (14) p. 5.

Equipment Tasks

(43-6) What are some of the positions in the United States Forestry Service? (2) pp. 103-104; (11) pp. 28-106; (10) pp. 2-3, 17; (14) pp. 7-9.

(43-7) What are some types of positions open outside the United States Forestry Service? (1) p. 289; (7) p. 182; (2) p. 104; (11) pp. 108-118; (12) p. 88; (3) pp. 72-73; (10) pp. 4-5; (14) p. 8.

(SG-8) What are some of the forest ranger's tasks (a) in making travel and communication through the forest easier? (b) in protecting the forest from fire? (c) in protecting forest resources? (d) in making forest land available to those who are allowed to use it? (13) pp. 171; (8) pp. 46-50; (7) pp. 179-181; (2) pp. 106-107; (14) pp. 9-14; (11) pp. 30-45; (12) pp. 68-69; (9) p. 67; (5) pp. 66-68; (10) pp. 12-13, 17.

(*SG-9) What is the work of a Forest Supervisor? (14) p. 10.

(*SG-10) What are the duties usually assigned to the State forester? (11) pp. 84-89.

Advantages and Disadvantages

(SG-11) What advantages do you think the forester has when the following aspects are considered: (a) effect on health? (b) surroundings? (c) knowledge required? (d) means of appointment? (13) p. 173; (5) p. 70; (14) p. 2; (15) p. 20.

(SG-12) What disadvantages would you point out? (1) p. 259; (13) p. 173; (2) p. 107; (5) pp. 70-71; (10) pp. 16-17; (14) p. 21.

Training

(SG-13) What subjects, in addition to forestry, would help the forester? (7) p. 182; (10) pp. 10-12; (14) p. 17.

(*SG-14) What subjects are offered in a forestry

(30-8) What are some of the forest ranger's tasks (a) in making travel and communication through the forest easier; (b) in protecting the forest from fire; (c) in protecting forest resources; (d) in making forest land available to those who are allowed to use it? (16) pp. 171; (8) pp. 46-60; (7) pp. 170-183; (2) pp. 100-107; (14) pp. 7-14; (11) pp. 30-45; (12) pp. 68-69; (9) p. 67; (5) pp. 68-69; (10) pp. 12-13, 17.

(WRC-2) What is the work of a forest supervisor? (14) p. 10.

(WRC-10) What are the duties usually assigned to the state forester? (11) pp. 44-50.

Advantages and Disadvantages

(30-11) What advantages do you think the forester has when the following aspects are considered: (a) effect on health; (b) surroundings; (c) knowledge required; (d) means of amplishment? (13) p. 173; (5) p. 70; (11) p. 2; (15) p. 20.

(30-12) What disadvantages would you point out? (1) p. 290; (13) p. 1 ; (2) p. 107; (5) pp. 70-71; (10) pp. 10-37; (14) p. 23.

Training

(32-13) What subjects, in addition to forestry, would help the forester? (7) p. 182; (10) pp. 12-13; (14) p. 17.

(32-14) What subjects are offered in a forestry

course? Look up the meanings of any terms you do not understand. (8) pp. 10-12; (11) pp. 123-149; (14) p. 17.

(SG-15) How does a forester in the United States Forest Service get his position? (2) p. 108; (10) p. 17; (14) p. 19.

(*SG-16) How much time does a trained forester spend in education? (7) p. 182; (2) p. 108; (5) p. 69; (14) pp. 16-18.

Financial Returns

(SG-17) What salary may a forest ranger expect in the beginning? after ten years? (13) p. 173; (7) p. 181; (11) pp. 63-84; (2) p. 69; (6) p. 67; (5) p. 73; (10) p. 8; (14) pp. 19-20.

Abilities Needed

(SG-18) What kind of a man will succeed as a forester? Why? (13) p. 172; (7) p. 181; (2) p. 107; (11) pp. 63-84; (12) p. 69; (5) p. 66; (14) pp. 15-16.

(*SG-19) Consider his health and strength, his knowledge, intelligence, and foresight, his understanding of people, and his character. Give reasons for the abilities you name. (10) pp. 8-10; (14) pp. 15-16.

(SG-20) As soon as you have completed the required problems, write a brief summary and hand it to your teacher. You may then choose optional activities from the card file.

courses? Look up the meanings of any terms you do not understand. (8) pp. 10-12; (11) pp. 123-149; (14) p. 17.

(21-15) How does a forester in the United States Forest Service get his position? (2) p. 108; (10) p. 17; (14) p. 19.

(22-16) How much time does a trained forester spend in education? (7) p. 182; (8) p. 108; (9) p. 68; (14) pp. 10-12.

Financial Returns

(23-17) What salary may a forest ranger expect in the beginning? after ten years? (13) p. 172; (7) p. 181; (11) pp. 83-84; (9) p. 68; (8) p. 67; (3) p. 78; (10) p. 5; (14) pp. 18-20.

Qualities Needed

(24-18) What kind of a man will succeed as a forester? Why? (13) p. 172; (7) p. 181; (2) p. 107; (11) pp. 83-84; (12) p. 38; (8) p. 66; (14) pp. 13-16.

(25-19) Consider his health and strength, his knowledge, intelligence, and foresight, his understanding of people, and his character. Give reasons for the qualities you name. (10) pp. 5-10; (14) pp. 15-16.

(26-20) As soon as you have completed the required problems, write a brief summary and hand it to your teacher. You may then choose optional activities from the card file.

References

1. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1936.

2. Chapman, Paul, Occupational Guidance, Turner E. Smith and Co., Atlanta, Ga., 1937.

3. Clayton, Ernest, What Shall I Be? D. Appleton Co., Boston, Mass., 1931.

4. Cottler, Joseph and Brecht, Harold, Careers Ahead, Little, Brown Co., Boston, Mass., 1936.

5. Davis, Frank G. and Davis, B. Carnall, Guidance for Youth, Ginn and Co., Boston, Mass., 1928.

6. Edmonson, Joseph B. and Dondineau, Arthur, Vocations Through Problems, MacMillan Co., New York, N. Y., 1937.

7. Hill, Howard C., Vocational Civics, Ginn and Co., Boston, Mass., 1928.

8. Holbrook, Harold Lyman, and MacGregor, A. Laura, Our World of Work, Allyn and Bacon, Boston, Mass., 1929.

9. Lane, Mary Rogers, Vocations in Industry, Vol. III, International Textbook Co., Scranton, Pa., 1929.

10. Career Monograph, No. 23, Forestry As A Career, The Institute for Research, Chicago, Ill., 1931.

11. Pinchot, Gifford, The Training of a Forester, J. B. Lippincott Co., Philadelphia, Pa., 1917.

12. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

13. Rosengarten, William, Choosing Your Life Work, McGraw, Hill Co., New York, N. Y., 1924.

14. Success Pamphlet, Forestry, Monograph, Vocational Information Series, Chloris Shade, Director, Morgan-Dillon Co., Publishers, Chicago, Ill., 1937.

Optional Activities

1. Plan a talk using lantern slides on forestry.

References

1. Brewer, John M., Occupations, Ginn and Co., Boston, Mass., 1930.

2. Chapman, Paul, Occupational Guidance, Turner E. Smith and Co., Atlanta, Ga., 1937.

3. Clayton, Ernest, What Shall I Be? D. Appleton Co., Boston, Mass., 1931.

4. Cottler, Joseph and Brecht, Harold, Careers Ahead, Little, Brown Co., Boston, Mass., 1936.

5. Davis, Frank G. and Davis, E. Darnell, Guidance for Youth, Ginn and Co., Boston, Mass., 1934.

6. Edmonson, Joseph B. and Bondinear, Arthur, Vocations Through Problems, Macmillan Co., New York, N. Y., 1937.

7. Hill, Howard C., Vocational Civics, Ginn and Co., Boston, Mass., 1932.

8. Holbrook, Harold Lyman, and Macgregor, A. Lorne, Our World of Work, Allyn and Bacon, Boston, Mass., 1939.

9. Lane, Mary Rogers, Vocations in Industry, Vol. III, International Textbook Co., Scranton, Pa., 1929.

10. Career Monograph, No. 26, Forestry as a Career, The Institute for Research, Chicago, Ill., 1931.

11. Pinchot, Gifford, The Training of a Forester, J. B. Lippincott Co., Philadelphia, Pa., 1917.

12. Proctor, William Martin, Vocations, Houghton Mifflin Co., New York, N. Y., 1929.

13. Rosenstein, William, Choosing Your Life Work, McGraw Hill Co., New York, N. Y., 1936.

14. Success Pamphlet, Forestry, Monograph, Vocational Information Series, Chlorie Shade, Director, Morgan-Dillon Co., Publishers, Chicago, Ill., 1937.

Optional Activities

1. Plan a talk using lantern slides on forestry.

2. Make an exhibit showing the many uses for forest products.

3. Make a chart showing all the articles we use which must come from forest products.

4. Make a map showing forest regions in the United States.

5. Look up the meaning of the term "Forest Conservation". Tell the class why it is important.

6. Make an exhibit of pictures, books, drawings, or charts which will help the class to understand the work of the forester.

7. Draw a cartoon showing one of the disadvantages of the forester's life.

8. Look up some of the methods by which the forester fights fires. Make a report to the class.

9. Make a series of simple drawings, each depicting one fact concerning the forester under: (a) Service to Others; (b) Required Tasks; (c) Advantages and Disadvantages; (d) Training; (e) Financial Returns; (f) Abilities Needed.

10. Make a chart showing the steps of promotion in the United States Forestry Service.

11. Where is the nearest college offering a course in forestry? What courses are offered?

12. Imagine yourself a visitor to a forest ranger's hut. Dramatize the conversation that may take place.

2. Make an exhibit showing the many uses for forest products.

3. Make a chart showing all the articles we use which must come from forest products.

4. Make a map showing forest regions in the United States.

5. Look up the meaning of the term "Forest Conservation". Tell the class why it is important.

6. Make an exhibit of pictures, books, drawings, or charts which will help the class to understand the work of the forester.

7. Draw a cartoon showing one of the disadvantages of the forester's life.

8. Look up some of the methods by which the forester fights fires. Give a report to the class.

9. Make a series of simple drawings, each copying one fact concerning the forester under: (a) Service to Oregon; (b) Required Tools; (c) Advantages and disadvantages (d) Training; (e) Financial Returns; (f) Activities Needed.

10. Make a chart showing the steps of promotion in the United States Forestry Service.

11. Where is the nearest college offering a course in forestry? What courses are offered?

12. Imagine yourself a visitor to a forest ranger's home. Prepare the conversation that may take place.

13. Write an imaginary diary of a forester's busy day.

14. Do you know any songs or poems about the forest and its workers? Let the class enjoy them. What about "Trees" by Joyce Kilmer?

15. Perhaps you have read stories of forest life or adventure. Retell one of these stories to the class.

16. What are some things a forester should know about trees? What is meant by the term "technical forestry"?

Class Presentation Period

During this period the group may arrange for the presentation of reports and any related optional activity. (Allow sufficient time for questions, comments, and discussions.)

Test

Only those pupils who studied with the forestry group will take the test.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

*The forester's knowledge of trees should include 1.....

a) the name by which each tree is known.
b) the names and uses to which each tree is put.
c) the names, uses, and how new growths are started.
d) names, uses, and ways of reproduction, and conditions needed for growth.

13. Write an imaginary diary of a forester's busy day.

14. Do you know any songs or poems about the forest and its workmen? Let the class enjoy them. What about "Trees" by Joyce Kilmer?

15. Perhaps you have read stories of forest life or adventure. Retell one of these stories to the class.

16. What are some things a forester should know about trees? What is meant by the term "technical forestry"?

Class Preparation Period

During this period the group may arrange for the presentation of reports and any related optional activity. (Allow sufficient time for questions, comments, and discussion.)

Test

Only those pupils who attend with the forestry group will take the test.

Mastery Test

On the line to the right place the letter of the answer which makes the sentence correct.

The forester's knowledge of trees should include ..... 1.

a) the name by which each tree is known.
b) the names and uses to which each tree is put.
c) the nature, uses, and how new growths are started.
d) names, uses, and ways of reproduction, and conditions needed for growth.

*The occupation of forestry offers 2.....

a) many openings to all who are trained.
b) not as many openings as the number of trained foresters.
c) an opportunity to make great investment.
d) an opportunity for any boy who prefers work to college.

The aspect of the forester's life that proves difficult for the beginner is usually 3.....

a) the quiet of the woods.
b) the heavy manual work often required.
c) the isolation and discomforts he must accept.
d) the low income of the beginner.

Few women enter forestry as an occupation because 4.....

a) they find the work uninteresting.
b) too much education is required.
c) women do not enjoy working alone.
d) the work has too many strenuous tasks and hardships.

*One of the main reasons why Americans have begun to realize the need for conserving forests is 5.....

a) recent experiences with floods, droughts, and erosion.
b) the increasing practice of camping and auto picnics in forest parks.
c) the love of Americans for trees.
d) the need of industry for more lumber than can be obtained.

One of the greatest advantages and rewards that come to the forester is 6.....

a) the opportunity to meet people.
b) the chance for healthful work.
c) the chance for promotion.
d) the opportunity to give service to the people of America.

The occupation of forestry offers 3.....

a) many openings to all who are trained.
b) not as many openings as the number of trained foresters.
c) an opportunity to make great investment.
d) an opportunity for any boy who prefers work to college.

The aspect of the forester's life that proves difficult for the beginner is usually 3.....

a) the quiet of the woods.
b) the heavy manual work often required.
c) the isolation and discomforts he must accept.
d) the low income of the beginner.

Few women enter forestry as an occupation because 4.....

a) they find the work uninteresting.
b) too much education is required.
c) women do not enjoy working alone.
d) the work has too many strenuous tasks and hardships.

One of the main reasons why Americans have begun to realize the need for conserving forests is 5.....

a) recent experiences with floods, droughts, and erosion.
b) the increasing practice of camping and auto picnics in forest parks.
c) the love of Americans for trees.
d) the need of industry for more lumber than can be obtained.

One of the greatest advantages and rewards that come to the forester is 6.....

a) the opportunity to meet people.
b) the chance for healthful work.
c) the chance for promotion.
d) the opportunity to give service to the people of America.

Test

From the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The forester is important because he (1) 1.....
our forest land.

Among those who use our forest reserva-
tions under the supervision of the forester are 2.....
(2) and sheep raisers; (3) dealers; people 3.....
who seek (4); scientists; (5); and those 4.....
who enjoy fishing. 5.....

From the forest we get materials that
are (6) to our civilization. 6.....

Care of the forests prevents the loss of
valuable (7), and reduces the danger of 7.....
(8) and drought. In these cases the forest 8.....
acts as a (9) in holding the water. 9.....

The movement to save our forests is known
as the forest (10) movement. 10.....

1. soil
2. windbreak
3. agricultural
4. preserves
5. cultivates
6. recreation
7. Conservation
8. cattle
9. basic
10. grass
11. hunters
12. floods
13. salesmen
14. frost
15. lumber
16. oil
17. reservoir

Test

When the list at the bottom of the page choose a word that will make each of the following sentences correct. Write the number of the correct word on the line at the right.

The forester is important because he (1) .....
our forest land.

Among those who use our forest resources-
(2) under the supervision of the forester are .....
(3) and sheep raisers; (4) dealers; people .....
who seek (5) ; vacationists; (6) ; and those .....
who enjoy fishing. .....

From the forest we get materials that
are (8) to our civilization. .....

Care of the forests prevents the loss of
valuable (9) , and reduces the danger of .....
(10) and drought. In these ways the forest .....
acts as a (11) in holding the water. .....

The movement to save our forests is known
as the Conservation (12) movement. .....

1. soil
2. timberman
3. agriculturist
4. preserves
5. cultivated
6. recreation
7. conservation
8. cattle
9. fields
10. grass
11. lumbers
12. floods
13. sawmill
14. frost
15. lumber
16. oil
17. reservoir

The (11) takes care of trees along 11.....
streets and boulevards.

The foresters that are employed by the
United States Forest Service enter this work
by competitive (12) under the Civil Service. 12.....

*The forester must continually add to
his (13) on the plant and animal life of the 13.....
forest.

The forest ranger must be able to build
(14), and (15), in order that he may get 14.....
through the forest easily. 15.....

He must put up (16) lines so that he may 16.....
communicate with others in time of need.

Certain areas must be set aside. He
builds (17) to enclose these areas. 17.....

He protects the forest from (18) by 18.....
posting warning (19), putting out sparks 19.....
and small (20), and supervising the areas 20.....
which campers are allowed to use.

1. fires	7. trails	13. examination
2. United States	8. city	14. fires
3. bridges	9. signs	15. fences
4. pictures	10. disease	16. service
5. information	11. telephone	17. high walls
6. power stations	12. temporary	18. lights

The _____ (11) takes care of trees along streets and boulevards. 11

The foresters that are employed by the United States Forest Service enter this work by competitive _____ (12) under the Civil Service. 12

The forester must continually add to his _____ (13) on the plant and animal life of the forest. 13

The forest ranger must be able to build _____ (14), and _____ (15), in order that he may get through the forest easily. 14 15

He must put up _____ (16) lines so that he may communicate with others in time of need. 16

Certain areas must be set aside. He builds _____ (17) to enclose these areas. 17

He protects the forest from _____ (18) by posting warning _____ (19), putting out camps and small _____ (20), and supervising the areas which campers are allowed to use. .....18 .....19 20

1. fires	7. trails	13. examination	
2. United States	8. city	14. fires	
3. ranger	9. signs	15. fences	
4. pictures	10. classes	16. service	
5. information	11. telephone	17. high walls	
6. power stations	12. temporary	18. lights	

He must be sure that people using the 21.....
forest land have (21) to do so.

*The forest ranger makes reports to the
Forest (22) who is the general manager of 22.....
the forest region.

The work of the ranger is done in the 23.....
(23) with plenty of healthful (24). 24.....

The forester has the opportunity to
study (25). 25.....

His work is (26) in comparison with 26.....
routine jobs.

He meets many (27) which challenge 27.....
his best thinking.

The forester must work under all sorts
of (28) conditions. 28.....

The work is very (29) and physically 29.....
tiring.

He is (30) most of the time, and often 30.....
misses his (31) life keenly. 31.....

1. Guard
2. problems
3. people
4. exercise
5. isolated
6. influence
7. Supervisor
8. strenuous
9. out-of-doors
10. social
11. weather
12. discomfort
13. permit
14. varied
15. monotonous
16. office
17. soil
18. light
19. nature
20. in contact with people

He must be sure that people using the forests land have _(21)_ to do so. 21.....

The forest ranger makes reports to the forest _(22)_ who is the general manager of the forest region. 22.....

The work of the ranger is done in the _(23)_ with plenty of beautiful _(24)_. 23..... 24.....

The forester has the opportunity to study _(25)_. 25.....

His work is _(26)_ in comparison with routine jobs. 26.....

He needs many _(27)_ which challenge his best thinking. 27.....

The forester must work under all sorts of _(28)_ conditions. 28.....

The work is very _(29)_ and physically tiring. 29.....

He is _(30)_ most of the time, and often misses his _(31)_ life keenly. 30..... 31.....

1. among
2. cooling
3. people
4. exercise
5. isolated
6. influence
7. supervision
8. strenuous
9. out-of-doors
10. social
11. weather
12. discomfort
13. permit
14. varied
15. monotonous
16. office
17. soil
18. light
19. nature
20. in contact with people

CHAPTER XII

A DISCUSSION ON THE TEACHING OF THE UNITS

The Problems Encountered

Pupil Attitude.-- In launching the work on the units in agricultural occupations, the writer met the traditional attitude of the city boy and girl to the country worker. In the case conference that introduced the work, this attitude was very evident. At first, sympathy was entirely with the boy who wanted to leave the farm and "count for something in the world".

The lack of texts.-- As indicated on a previous page, the difficulty of securing texts that treated the subject adequately raised a problem.

The reading level of texts.-- The textbooks available presented still another difficulty. Seventh-grade pupils found the vocabulary very difficult and the sentences much involved. They were unable to get much information from the printed page, even after considerable effort. As a result, the slow reading made it necessary to extend the tentative time limits.

CHAPTER XII

A DISCUSSION ON THE TEACHING OF THE UNITS

The Problems Encountered

Pupil aptitude.-- In launching the work on the units in agricultural occupations, the writer met the traditional attitude of the city boy and girl to the country worker. In the case conference that introduced the work, this attitude was very evident. At first, sympathy was entirely with the boy who wished to leave the farm and "count for something in the world".

The lack of texts.-- As indicated on a previous page, the difficulty of securing texts that treated the subject adequately raised a problem.

The reading level of texts.-- The textbooks available presented still another difficulty. Seventh-grade pupils found the vocabulary very difficult and the sentences much involved. They were unable to get much information from the printed page, even after considerable effort. As a result, the slow reading made it necessary to extend the tentative time limits.

Meeting the Problems

Change in attitude.-- The introductory class discussion served to bring out the fact that agriculture was basic to our ways of living. The pupils began to realize that the products and services of agricultural workers were evident in every phase of living. Interest grew as pupils scanned newspapers and magazines eagerly for headlines relating to agriculture. Before long, the groups, at first indifferent, were contributing literally hundreds of pictures, clippings, and pamphlets, from most unexpected places. They watched for agricultural activities in the next yard and street and reported these to the class voluntarily. The first barrier was breaking.

Collecting information.-- The use of the six topics in studying the occupations served to make plain the inadequacy of most texts for our work. Pupils requested the privilege of writing to the government for special information. They ransacked attics and closets for agricultural magazines and information. The committee which was elected to take charge of these contributions requested that two tables be reserved in order that such informational material might be easily accessible. These tables were much in use during work periods. The librarian proved most helpful in sending in books that might help in building a background of understanding. Farm news columns in newspapers and a variety of government

Meeting the Problems

Change in attitude.-- The introductory class discussion served to bring out the fact that agriculture was basic to our ways of living. The pupils began to realize that the products and services of agricultural workers were evident in every phase of living. Interest grew as pupils scanned newspapers and magazines eagerly for headlines relating to agriculture. Before long, the groups, at first indifferent, were distributing literally hundreds of pictures, clippings, and pamphlets, from most unexpected places. They watched for agricultural activities in the next year and street and reported cases to the class voluntarily. The first barrier was breaking.

Collecting information.-- The use of the six topics in studying the occupations served to make plain the inadequacy of our texts for our work. Pupils requested the privilege of writing to the government for special information. They ransacked attics and closets for agricultural magazines and information. The committee which was elected to take charge of these contributions requested that two tables be reserved in order that such informational material might be easily accessible. These tables were much in use during work periods. The library proved most helpful in sending in books that might help in building a background of understanding. Farm news columns in newspapers and a variety of government

reports gave current information. The bulletin board committee arranged a display each week. These displays were the basis for many class discussions.

Vocabulary building.-- The writer found that meeting the problems of vocabulary was difficult and proved less satisfactory than other phases of the unit. In the mastery tests, failure to answer test items correctly were in the majority of cases the result of lack of word understanding. For this reason, the words which the pupils needed to learn were underscored in the delimitation and unit assignment. In informal conversation the writer, relieved through previous planning and definite instructions on the guide sheet, was able to give individual help in reading and in the interpretation of words and pictures.

Various Methods Used in Mastering the Units

Written work.-- As one means of determining the level of achievement on the required work indicated on the study guide, the pupils were requested to hand to the teacher a short resumé of the information gained. A survey of such papers made it possible for the teacher to discover the important points missed or misunderstood during the individual work period. Individual conferences indicated to the pupil the items to be re-checked.

The use of the opaque projector.-- The best

reports gave current information. The bulletin board committee arranged a display each week. These displays were the basis for many class discussions.

Vocabulary building.-- The writer found that meeting the problems of vocabulary was difficult and proved less satisfactory than other phases of the unit. In the mastery tests, failure to answer best these connectedly were in the majority of cases the result of lack of word understanding. For this reason, the words which the pupils needed to learn were understood in the delimitation and unit assignment. In informal conversation the writer, relieved through previous class and individual instructions on the guide sheet, was able to give individual help in reading and in the interpretation of words and pictures.

Various methods used in mastering the units

Written work.-- As one means of determining the level of achievement on the required work indicated on the study guide, the pupils were requested to hand to the teacher a short resume of the information gained. A survey of such papers made it possible for the teacher to discover the important points missed or misunderstood during the individual work period. Individual conferences indicated to the pupil the items to be re-studied.

The use of the opaque projector. - The best

contributions in pictures and cartoons relating to the unit, were placed in the projector. A number of slides made available to the class were included. This served as a review of important facts and concepts.

Simple dramatization.-- Each group presented a number of dramatizations of simple situations in farm living. Hiring the farm helper, a father and son discussion of forestry, and the family argument stressing the relative importance of the farmer and business man, are examples of one method used to emphasize truths that might be missed if difficult textbooks were the only source of information.

Notebook work.-- The optional activities gave ample opportunity for special work to be filed in notebooks. The result was a number of rather originally arranged, and well-illustrated notebooks, each containing individual reports, copies of poems, songs, dramatic sketches, and book reviews.

Blackboard charts.-- These were necessarily limited because of space. The charts that proved most effective were (1) the extent of rural electrification; (2) Rhode Island's agricultural areas; and (3) the decreasing time required to harvest an acre of wheat from 1831 to 1931.

Correlation with other departments.-- The field of agriculture was soon discovered to be so broad that in the limited time only a most inadequate survey could be gained in the occupational civics classes. With this thought in mind,

contributions in pictures and cartoons relating to the unit, were placed in the projector. A number of slides made available to the class were included. This served as a review of important facts and concepts.

Simple dramatization.-- Each group presented a number of dramatizations of simple situations in farm living. Among the farm helper, a farmer and non discussion of forestry, and the family arrangement expressing the relative importance of the farmer and business man, are examples of one method used to dramatize truths that might be misses in difficult textbooks were the only source of information.

Notebook work.-- The optional activities gave ample opportunity for special work to be filed in notebooks. The result was a number of rather originally arranged, and well-illustrated notebooks, each containing individual reports, copies of poems, songs, dramatic sketches, and book reviews.

Blackboard charts.-- These were necessarily limited because of space. The charts that proved most effective were (1) the growth of rural electrification; (2) Ohio Island's agricultural areas; and (3) the declining time required to harvest an acre of wheat from 1831 to 1931.

Correlation with other departments.-- The field of activities was soon discovered to be so broad that in the limited time only a most inadequate survey could be gained in the correlational civics classes. With this fact in mind,

the writer interviewed various teachers on the possibilities of correlation. The response was gratifying, and the experience has proved to the writer the value of such procedure. A brief statement of the work follows.

In the social arts classes, usually termed auditorium classes, two definite types of work were undertaken. The first was the coaching and staging of an original play written co-operatively in the occupations and auditorium classes. The play depicted the preparation and discussion just previous to a popular county fair. The scene entitled "AT the Fair" included exhibits, speeches, and happy times which the farmers enjoyed at the fair. Every child in the group had a part. The performance was given before all the 7-A groups and pupils of several other grades. The big disappointment to the cast was, that at the beginning of the following term, arrangements could not be made to repeat the performance for the group about to study agriculture.

The auditorium classes also undertook radio broadcasts within the school. Declamations, a part of auditorium work, were given up in favor of radio talks on agriculture. This proved highly successful, many who shunned floor talks being the first to volunteer for radio speeches. All such speeches were filed in a "Radio Notebook".

Classes in art correlated their work with this study of agriculture. Since creative drawing was the task at hand,

the writer interviewed various teachers on the possibilities of correlation. The response was gratifying, and the experience has proved to the writer the value of such procedure. A brief statement of the work follows.

In the social arts classes, usually termed auditorium classes, two definite types of work were undertaken. The first was the composing and staging of an original play written co-operatively in the occupations and auditorium classes. The play depicted the preparation and discussion just previous to a popular county fair. The scene entitled "At the Fair" included exhibits, speeches, and happy times which the farmers enjoyed at the fair. Every child in the group had a part. The performance was given before all the 7-a groups and pupils of several other grades. The city dwellers, to the great was, that at the beginning of the following term, arrangements could not be made to repeat the performance for the group about to study agriculture.

The auditorium classes also undertook radio broadcasts within the school. Dedications, a part of auditorium work, were given up in favor of radio talks on agriculture. This proved highly successful, many who showed floor talks being the first to volunteer for radio speeches. All such speeches were filed in a "radio textbook".

Classes in art correlated their work with this study of agriculture. Since excessive drawing was the task at hand,

the art teacher was willing that such drawings should depict farm scenes. Many pupils chose dairying, market gardening, and fruit-raising as subjects for their original work. The drawings were exhibited in the occupational civics class, and showed adequate understanding of the concepts involved.

The English department undertook the writing of letters to the departments of agriculture in various states. As a result, the committee was able to arrange a fine exhibit of State pamphlets, reports, and bulletins explaining State services. Oral compositions on agriculture were a feature of this work. Written work was copied in regular penmanship periods.

Music was one factor in correlation. This began with the training for songs to be sung at the "County Fair", but included further work with folk songs and spirituals which had their beginning in life on the farm. This feature was one of the most interesting of all the correlated work.

Concluding statement.-- After the satisfying experience of teaching these units, the writer feels that the following statements sum up the advantages inherent in the method.

(1) The Unit-Assignment Method[1/] makes possible the organization of subject matter according to accepted principles of educational psychology.

1/ A volume on Unit Assignment by Roy O. Billett is now under preparation and will be published within a short time.

the art teacher was willing that such drawings should depict farm scenes. Many pupils chose naturally market gardening, and fruit-raising as subjects for their original work. The drawing a were exhibits, in the occupational civics class, and showed adequate understanding of the concepts involved.

The English department undertook the writing of letters to the departments of agriculture in various states. As a result, the committee was able to arrange a fine exhibit of State pamphlets, reports, and bulletins explaining state services. Oral compositions on agriculture were a feature of this work. Written work was copied in regular penmanship texts.

Music was one factor in correlation. This began with the training for songs to be sung at the "County Fair", but included further work with folk songs and spirituals which had their beginning in life on the farm. This feature was one of the most interesting of all the correlated work.

Concluding statement.-- After the satisfying experience of recording these results, the writer feels that the following statements are on the advantages inherent in the method.

(1) The Unit-Assignment Method[1] makes possible the organization of subject matter according to accepted principles of educational psychology.

[1] A review of Unit Assignment by Roy O. Billett is now under preparation and will be published within a short time.

(2) The unit defines the goal to be attained, thus necessitating adequate planning, and giving certainty of direction.

(3) The activities by which the pupil is to master the unit are carefully selected, definitely stated, and clearly explained in the unit assignment.

(4) The necessity for planning ahead leaves the teacher free during the classroom period to guide the activities of the group toward the achievement goal stated in the unit.

(5) The unit assignment may be easily differentiated and enriched to meet the varied needs, interests, abilities, and experiences of the class. The result is increased efficiency in teaching and greater achievement on the part of the learner.

(2) The unit defines the goal to be attained, thus necessitating adequate planning, and giving certainty of direction.

(3) The activities by which the pupil is to master the unit are carefully selected, definitely stated, and clearly explained in the unit assignment.

(4) The necessity for planning ahead leaves the teacher free during the classroom period to guide the activities of the group toward the achievement goal stated in the unit.

(5) The unit assignment may be easily differentiated and enriched to meet the varied needs, interests, abilities, and experiences of the class. The result is increased efficiency in teaching and greater achievement on the part of the learner.

APPENDIX

Keys for Mastery Tests

(Page 48)

1 -- c

2 -- a

3 -- c

4 -- b

5 -- c

6 -- c

7 -- a

8 -- b

9 -- c

10 -- b

11 -- b

(Page 50)

1 -- 8

2 --15

3 -- 2

4 --17

5 -- 1

6 --16

7 -- 4

8 --10

9 --14

10 -- 19

11 -- 5

12 -- 6

(Page 51)

13 -- 11

14 -- 18

15 -- 21

16 -- 14

17 -- 9

18 -- 17

19 -- 20

20 -- 12

21 -- 6

23 -- 23

24 -- 4

25 -- 1

26 -- 19

27 -- 14

28 -- 6

29 -- 22

30 -- 15

31 -- 23

32 -- 4

33 -- 17

34 -- 9

35 -- 11

36 -- 1

(Page 52)

37 -- 2

38 -- 10

39 -- 13

(Page 72)

1 -- 8

2 -- 2

3 -- 3

4 -- 6

5 -- 13

6 -- 11

7 -- 10

8 -- 18

9 -- 9

10 -- 12

11 -- 7

12 -- 15

APPENDIX

Keys for Mastery Tests

(Page 48)

1 -- c
2 -- a
3 -- c
4 -- c
5 -- c
6 -- c
7 -- a
8 -- b
9 -- c
10 -- b
11 -- b

(Page 50)

1 -- d
2 --15
3 -- 2
4 --17
5 -- 1
6 --12
7 -- 4
8 --10
9 --14
10 -- 12
11 -- 5
12 -- 8

(Page 54)

13 -- 11
14 -- 10
15 -- 21
16 -- 14
17 -- 9
18 -- 17
19 -- 20
20 -- 19
21 -- 8
22 -- 20
23 -- 1
24 -- 1
25 -- 19
26 -- 14
27 -- 6
28 -- 22
29 -- 15
30 -- 25
31 -- 25
32 -- 4
33 -- 17
34 -- 8
35 -- 11
36 -- 1

(Page 52)

37 -- 2
38 -- 10
39 -- 18

(Page 72)

1 -- 8
2 -- 2
3 -- 3
4 -- 6
5 -- 13
6 -- 11
7 -- 10
8 -- 14
9 -- 9
10 -- 12
11 -- 7
12 -- 15

13 -- 14
14 -- 1
15 -- 6
16 -- 16
17 -- 8
18 -- 21
19 -- 4
20 -- 10
21 -- 20
22 -- 16
23 -- 7
24 -- 18
25 -- 1
26 -- 13
27 -- 22
28 -- 5
29 -- 14
30 -- 24
31 -- 2
32 -- 11
33 -- 2
34 -- 11
35 -- 15
36 -- 20
37 -- 8
38 -- 6
39 -- 17
40 -- 13
41 -- 4
42 -- 12
43 -- 1
44 -- 5

(Page 93)

1 -- b
2 -- c
3 -- b
4 -- c
5 -- c
6 -- a
7 -- b
8 -- d
9 -- c
10 -- a

(Page 95)

1 -- 4
2 -- 1
3 -- 8
4 -- 19
5 -- 7
6 -- 12
7 -- 5
8 -- 15
9 -- 2
10 -- 14
11 -- 18
12 -- 11
13 -- 6
14 -- 2
15 -- 7
16 -- 13
17 -- 10
18 -- 1
19 -- 4
20 -- 9
21 -- 15
22 -- 8
23 -- 3
24 -- 11
25 -- 15
26 -- 3
27 -- 4
28 -- 1
29 -- 7
30 -- 11
31 -- 10

13 -- 14
14 -- 1
15 -- c
16 -- 16
17 -- 3
18 -- 21
19 -- 4
20 -- 10
21 -- 20
22 -- 16
23 -- 7
24 -- 10
25 -- 1
26 -- 15
27 -- 22
28 -- 5
29 -- 14
30 -- 24
31 -- 2
32 -- 11
33 -- 2
34 -- 11
35 -- 15
36 -- 20
37 -- 5

38 -- 6
39 -- 17
40 -- 13
41 -- 4
42 -- 12
43 -- 1
44 -- 5

(Page 93)

1 -- b
2 -- c
3 -- b
4 -- c
5 -- c
6 -- a
7 -- b
8 -- d
9 -- c
10 -- a

(Page 95)

1 -- 4
2 -- 1
3 -- 3
4 -- 19
5 -- 7
6 -- 12
7 -- 5
8 -- 15
9 -- 2
10 -- 14
11 -- 12
12 -- 11
13 -- 6
14 -- 2
15 -- 7
16 -- 13
17 -- 10
18 -- 1
19 -- 4
20 -- 9
21 -- 15
22 -- 8
23 -- 3
24 -- 11
25 -- 15
26 -- 3
27 -- 4
28 -- 1
29 -- 7
30 -- 11
31 -- 10

32 -- 13
33 -- 8
34 -- 4
35 -- 15
36 -- 1
37 -- 14
38 -- 8
39 -- 18
40 -- 12
41 -- 7
42 -- 16
43 -- 21
44 -- 3
45 -- 9

(Page 112)

1 -- 4
2 -- 7
3 -- 1
4 -- 11
5 -- 10
6 -- 8
7 -- 5
8 -- 9
9 -- 5
10 -- 9
11 -- 14
12 -- 7
13 -- 1
14 -- 8
15 -- 16
16 -- 11
17 -- 4
18 -- 12
19 -- 15
20 -- 1
21 -- 6
22 -- 12
23 -- 5
24 -- 2
25 -- 7
26 -- 10
27 -- 9
28 -- 13
29 -- 3
30 -- 8
31 -- 15
32 -- 5
33 -- 12
34 -- 2
35 -- 4
36 -- 11
37 -- 7
38 -- 13
39 -- 13
40 -- 2
41 -- 9
42 -- 5
43 -- 10
44 -- 16
45 -- 12
46 -- 7
47 -- 20
48 -- 1
49 -- 21
50 -- 14
51 -- 8
52 -- 3
53 -- 9
54 -- 5
55 -- 7
56 -- 11
57 -- 10
58 -- 2
59 -- 12
60 -- 4

1 -- 4
2 -- 7
3 -- 1
4 -- 11
5 -- 10
6 -- 8
7 -- 8
8 -- 9
9 -- 5
10 -- 9
11 -- 14
12 -- 7
13 -- 1
14 -- 8
15 -- 16
16 -- 11
17 -- 4
18 -- 12
19 -- 15
20 -- 1
21 -- 8
22 -- 12
23 -- 6
24 -- 2
25 -- 7
26 -- 10
27 -- 5
28 -- 15
29 -- 3
30 -- 4
31 -- 15
32 -- 5
33 -- 12
34 -- 2
35 -- 4
36 -- 11
37 -- 7
38 -- 15
39 -- 15
40 -- 2
41 -- 9
42 -- 5
43 -- 10
44 -- 10
45 -- 12
46 -- 7
47 -- 20
48 -- 1
49 -- 21
50 -- 14
51 -- 2
52 -- 3
53 -- 8
54 -- 5
55 -- 7
56 -- 11
57 -- 10
58 -- 2
59 -- 12
60 -- 4

(Page 130)

1 -- c

2 -- a

3 -- a

4 -- d

5 -- c

6 -- b

7 -- c

8 -- b

9 -- d

10 -- a

(Page 132)

1 -- 4

2 -- 8

3 -- 10

4 -- 6

5 -- 10

6 -- 14

7 -- 12

8 -- 1

9 -- 18

10 -- 5

11 -- 7

12 -- 11

13 -- 12

14 -- 8

15 -- 10

16 -- 1

17 -- 2

18 -- 14

19 -- 15

20 -- 13

21 -- 8

22 -- 11

23 -- 9

24 -- 14

25 -- 4

26 -- 7

27 -- 6

28 -- 7

29 -- 8

30 -- 9

31 -- 3

32 -- 1

33 -- 2

34 -- 4

35 -- 12

(Page 147)

1 -- c

2 -- d

3 -- b

4 -- b

5 -- c

6 -- d

7 -- d

8 -- b

9 -- a

10 -- b

11 -- d

12 -- b

(Page 150)

1 -- 3

2 -- 9

3 -- 12

4 -- 5

5 -- 1

6 -- 19

7 -- 15

8 -- 10

9 -- 16

10 -- 13

11 -- 6

12 -- 3

13 -- 13

14 -- 9

(Page 130)

1 -- c
2 -- a
3 -- a
4 -- d
5 -- a
6 -- b
7 -- c
8 -- b
9 -- d
10 -- a

(Page 132)

1 -- 4
2 -- 9
3 -- 10
4 -- 8
5 -- 10
6 -- 14
7 -- 13
8 -- 1
9 -- 18
10 -- 5
11 -- 7
12 -- 11
13 -- 12
14 -- 8
15 -- 10
16 -- 1
17 -- 2
18 -- 14
19 -- 15
20 -- 13
21 -- 8
22 -- 11
23 -- 9
24 -- 14
25 -- 4
26 -- 7
27 -- 6
28 -- 7
29 -- 3
30 -- 2
31 -- 5
32 -- 1
33 -- 2
34 -- 4
35 -- 12

(Page 147)

1 -- c
2 -- d
3 -- b
4 -- b
5 -- c
6 -- d
7 -- d
8 -- b
9 -- a
10 -- b
11 -- d
12 -- b

(Page 150)

1 -- 3
2 -- 9
3 -- 12
4 -- 5
5 -- 1
6 -- 10
7 -- 15
8 -- 10
9 -- 16
10 -- 14
11 -- 6
12 -- 3
13 -- 15
14 -- 9

15 -- 5
16 -- 18
17 -- 1
18 -- 11
19 -- 4
20 -- 20
21 -- 2
22 -- 19
23 -- 6
24 -- 12
25 -- 7
26 -- 15

(Page 166)

1 -- c
2 -- d

(Page 167)

1 -- 8
2 -- 16
3 -- 5
4 -- 1
5 -- 13
6 -- 3
7 -- 15
8 -- 6
9 -- 11
10 -- 17
11 -- 3
12 -- 1
13 -- 14
14 -- 10
15 -- 12
16 -- 8
17 -- 17
18 -- 13
19 -- 7
20 -- 15
21 -- 9
22 -- 4
23 -- 16
24 -- 17
25 -- 18
26 -- 6
27 -- 10
28 -- 9
29 -- 1
30 -- 13
31 -- 7
32 -- 2
33 -- 6
34 -- 11
35 -- 13
36 -- 18
37 -- 1
38 -- 4
39 -- 17
40 -- 10
41 -- 8
42 -- 2
43 -- 7
44 -- 5
45 -- 19
46 -- 9

(Page 182)

1 -- b
2 -- d
3 -- a
4 -- d
5 -- d

(Page 183)

1 -- 9
2 -- 12
3 -- 11
4 -- 10
5 -- 6
6 -- 5

7 -- 2
8 -- 1
9 -- 13
10 -- 3
11 -- 18
12 -- 11
13 -- 19
14 -- 20
15 -- 12
16 -- 22
17 -- 4
18 -- 1
19 -- 7
20 -- 23
21 -- 9
22 -- 4
23 -- 5
24 -- 8
25 -- 15
26 -- 17
27 -- 3
28 -- 1
29 -- 10
30 -- 14
31 -- 6
32 -- 7

(Page 202)

1 -- a
2 -- c
3 -- a
4 -- b
5 -- c
6 -- b
7 -- a
8 -- d
9 -- c
10 -- b

(Page 205)

1 -- 8
2 -- 15
3 -- 5
4 -- 11
5 -- 6
6 -- 3
7 -- 10
8 -- 13
9 -- 1
10 -- 4
11 -- 8
12 -- 14
13 -- 15
14 -- 18
15 -- 2
16 -- 10
17 -- 12
18 -- 17
19 -- 1
20 -- 4
21 -- 7
22 -- 14
23 -- 1
24 -- 12
25 -- 17
26 -- 4
27 -- 2
28 -- 8
29 -- 13
30 -- 6
31 -- 16
32 -- 3

(Page 223)

1 -- d
2- - b
3 -- c
4 -- d

1 -- a
2 -- c
3 -- a
4 -- b
5 -- c
6 -- b
7 -- a
8 -- d
9 -- c
10 -- b

(Page 205)

1 -- a
2 -- 15
3 -- 5
4 -- 11
5 -- c
6 -- 3
7 -- 10
8 -- 13
9 -- 1
10 -- 4
11 -- 8
12 -- 14
13 -- 9
14 -- 15
15 -- 2
16 -- 10
17 -- 12
18 -- 17
19 -- 1
20 -- 4
21 -- 7
22 -- 14
23 -- 1
24 -- 12
25 -- 17
26 -- 4
27 -- 2
28 -- 8
29 -- 15
30 -- 6
31 -- 16
32 -- 3

(Page 223)

1 -- d
2 -- c
3 -- c
4 -- a

5 -- a

6 -- d

(Page 225)

1 -- 4

2 -- 8

3 -- 15

4 -- 6

5 -- 11

6 -- 9

7 -- 1

8 -- 12

9 -- 17

10 -- 7

11 -- 8

12 -- 13

13 -- 5

14 -- 3

15 -- 7

16 -- 11

17 -- 15

18 -- 1 or 14

19 -- 9

20 -- 14 or 1

21 -- 13

22 -- 7

23 -- 9

24 -- 4

25 -- 19

26 -- 14

27 -- 2

28 -- 11

29 -- 8

30 -- 5

31 -- 10

8 -- a

9 -- d

(Page 225)

1 -- 4

2 -- 8

3 -- 15

4 -- 6

5 -- 11

6 -- 9

7 -- 1

8 -- 12

9 -- 17

10 -- 7

11 -- 8

12 -- 15

13 -- 5

14 -- 3

15 -- 7

16 -- 11

17 -- 15

18 -- 1 or 14

19 -- 9

20 -- 14 or 1

21 -- 13

22 -- 7

23 -- 9

24 -- 4

25 -- 19

26 -- 14

27 -- 2

28 -- 11

29 -- 8

30 -- 5

31 -- 10

BIBLIOGRAPHY

Billett, Roy O., Provisions for Individual Differences, Marking, and Promotion, Monograph No. 13, National Survey of Secondary Education, 1932, pp. 227-392. This Monograph contains a comprehensive discussion of the Unit-Assignment Method. Part IV is particularly helpful.

_____ "Directed Learning and the Unit Assignment", Proceedings, Department of Secondary School Principals, Bulletin No. 45, 1933, pp. 55-76. This paper gives brief clear-cut explanation of the basic considerations in unit organization.

Bode, Boyd H., Conflicting Psychologies of Learning, D. C. Heath and Co., Boston, Mass., 1929, IV, p. 305. The discussion of individual differences and their relation to school procedure is helpful.

Chapman, Paul, "What Has Farming to Offer America's Youth?" Occupations, November, 1937, pp. 134-137.

Counts, George S., The Social Foundations of Education, Charles Scribner's Sons, New York, N. Y., 1934. XIV - p. 563. This book offers a statement of the philosophy of the American public school upon which must be based curriculum and method.

Davis, Edwin W., "Aids to Occupational Research", Occupations, March, 1935, pp. 503-513. This is a guide to source material in the study of occupations.

Gooch, Wilbur I., "Occupational Information", Occupations, March, 1934, pp. 31-37. This study reveals the lack of available information on occupations and suggests the type of occupational information needed.

Harn, Ernest, Methods of Instruction in the Social Studies, Charles Scribner's Sons, New York, N. Y., 1937. XIX - p. 524. This book contains a helpful discussion of methods recommended for social studies classes. Chapters IX and X discuss the use of visual aids.

Silcox, F. A., "The Profession of Forestry", Occupations, March, 1934, pp. 14-20.

BIBLIOGRAPHY

Billett, Roy O., Provisions for Individual Differences, Marking, and Promotion, Yonkerson-on-Hudson, World Book Co., 1932, pp. 297-302. This longer work contains a comprehensive discussion of the Unit-Assignment Method. Part IV is particularly helpful.

"Directed Learning and the Unit Assignment", Proceedings, Department of Secondary School Principals, Bulletin No. 48, 1933, pp. 35-38. This paper gives brief clear-cut explanation of the basic considerations in unit organization.

Bode, Boyd H., Conflicting Psychologies of Learning, D. C. Heath and Co., Boston, Mass., 1922, IV, p. 306. The discussion of individual differences and their relation to school procedure is helpful.

Chapman, Paul, "What Has Failed to Offer America's Youth", Occupations, November, 1937, pp. 124-127.

Counts, George S., The Social Foundations of Education, Charles Scribner's Sons, New York, N. Y., 1934. XIV - p. 308. This book offers a statement of the philosophy of the American public school upon which must be based curricula and method.

Davis, Edwin W., "Aids to Occupational Research", Occupations, March, 1938, pp. 508-512. This is a guide to source material in the study of occupations.

Good, Hilbur I., "Occupational Information", Occupations, March, 1938, pp. 31-37. This study reveals the lack of available information on occupations and suggests the type of occupational information needed.

Gunn, Ernest, Methods of Instruction in the Social Studies, Charles Scribner's Sons, New York, N. Y., 1937. XIV - p. 321. This book contains a helpful discussion of methods recommended for social studies classes. Chapters IX and X discuss the use of visual aids.

Stiles, W. A., "The Profession of Forestry", Occupations, March, 1938, pp. 14-20.

Thayer, V. T., The Passing of the Recitation, D. C. Heath and Co., Boston, Mass., 1928. VIII - p. 331. The discussion of adapting instruction to meet individual differences is of value here.

The textbooks used in building unit assignments are listed under "References" in each chapter, and are therefore not included on this page.

Not to be taken from
the library

BOSTON UNIVERSITY
1 1719 02556 8074